

VENEZIA ENTERPRISES-Nazareth Trucking Terminal Act 2 Remedial Investigation / Final Report

3987 Easton-Nazareth Highway/Route 248 Nazareth, Pennsylvania 18064 Lower Nazareth Township, Northampton County

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1.0 Introduction

On behalf of Venezia Enterprises ("Venezia"), Earth Data Northeast, Inc. ("EDN") is pleased to provide the Pennsylvania Department of Environmental Protection ("PADEP") with this Remedial Investigation Report/Final Report for the Venezia trucking facility located at 3987 Easton-Nazareth Highway/Route 248 in Lower Nazareth Township, Northampton County, Pennsylvania (Figure 1).

On January 20, 2011 EDN submitted a Notice of Intent to Remediate ("NIR") to PADEP in accordance with the requirements of the Land Recycling and Remediation Standards Act ("Act 2") relative to the remediation of Volatile Organic Compounds ("VOCs") present in subsurface soils located near the center of the property. This area was used for wastewater containment and management operations conducted by the former property owner, Chemical Leaman Tank Lines, Inc. ("CLTL").

1.1 Background

CLTL developed the property as a trucking terminal in 1960. CLTL owned and operated the terminal from 1960 through 1999. Quality Carriers, Inc. ("Quality") acquired CLTL assets in 1999 and owned and operated the terminal through 2006. Venezia purchased the terminal from Ouality in 2006 after leasing one of its maintenance buildings in the mid 1990s.

In May 2007, the United States Environmental Protection Agency ("USEPA") advised Venezia that the facility had been identified as a "low priority" site under the Resource Conservation and Recovery Act ("RCRA") program, and an Environmental Indicator Inspection would be conducted to determine if Corrective Action, pursuant to RCRA, was necessary at the facility. The inspection was performed in June 2007 by PADEP's contractor, URS Corporation ("URS"). The results of the investigation and URS's findings and conclusions are presented in its September 2007 report. The following RCRA Areas of Concern ("AOCs")/ Solid Waste Management Units ("SWMUs") were identified by URS at the facility:

- Former Unlined Lagoons
- Former Cleaning Bay and Underground Sewer Line
- Wastewater Holding Tank

Reportedly, during the CLTL ownership, site operations included the cleaning of the interiors of tanker trucks. This activity began in December 1965 and ceased in 1979. Wastewater generated by the operation was contained in two, unlined lagoons located near the center of the site. The lagoon system was eliminated in 1973. From 1973 through 1979, wastewater generated from the process, which occurred in a cleaning bay, flowed through an underground sewer line into a cylindrical, concrete holding tank located along the eastern property boundary. Reportedly, this wastewater was transported off site. Additional information indicates that external rinsing of tankers also occurred during the CLTL ownership, and this process continued through 1985. URS prepared a Site Investigation Work Plan based on the results of the inspection.

In a September 18, 2009 letter, Venezia proposed to voluntarily implement the URS Site Investigation Work Plan pursuant to the USEPA's One Cleanup Program initiative that integrates coordination and planning between federal and state cleanup programs.

With the concurrence of the USEPA and PADEP, Venezia conducted the investigation in a manner consistent with the technical requirements of Act 2. The investigation was performed following an iterative, phased approach to meet the following objectives:

- Evaluate the need for Corrective Action at identified RCRA AOCs/SWMUs.
- Obtain liability relief for Venezia as provided by the Pennsylvania Land Recycling Program.1

This submittal presents the results of a Remedial Investigation and demonstrates attainment of the Site Specific Standard ("SSS") for soil through pathway elimination.

2.0 Characterization of Setting

2.1 Physical Site Characteristics

The 10-acre Venezia trucking terminal is located at 3987 Easton-Nazareth Highway/Route 248 in Lower Nazareth Township, Northampton County, Pennsylvania. The terminal, which allows unrestricted, vehicular access from Route 248, comprises: a docking station to load and unload trailers transporting non-hazardous bulk solids, a refueling area, and a maintenance shop. There are two buildings situated on the property: the northern-most building, reportedly built in 1959, occupies approximately 4,000 square feet and is currently leased to other tenants. The southern-most building, a maintenance shop, was reportedly built in 1972 and occupies approximately 9,000 square feet.

Land use immediately surrounding the property can best be described as industrial and agricultural. The eastern, southern, and western portions of the property are bound by a tree line and agricultural land, with a small, un-named tributary to Bushkill Creek located to the south. A large cement company/quarry is located to the north.

The portion of the property subject to remediation ("the Site") is shown in Figure 2. The Site is approximately 60 feet by 100 feet and positioned near the center of the property. It includes the two, former lagoons located immediately south of a dirt/gravel mound, as well as the mound itself. This mound is at least 350 feet from the nearest building.

Climate, Topography, and Drainage

Nazareth's climate is similar to the rest of the Lehigh Valley region, with four distinct seasons; summers are typically hot and humid, winters are cold, and the springs and falls are generally short and mild. In a typical year, rainfall appears to be spread evenly over

¹ Regulatory issues related to the investigation and closure of former diesel fuel Underground Storage Tanks ("USTs") are currently being resolved with PADEP through Pennsylvania Code, Chapter 245.

each month. In the winter, snowfall may vary from a light dusting to a significant accumulation.

A review of the United States Geological Survey ("USGS") 7 ½-minute, topographic, quadrangle map for Nazareth (Figure 1) indicates that the property is situated on nearly flat land, approximately 395 feet above sea level. Drainage across the site is generally southward toward the un-named creek. The general topographic gradient of the property slopes from the north-northwest.

Vegetation

The property is largely un-vegetated. Plant life is generally in the form of small hardwood trees/saplings, brush, and grasses around the perimeter of the facility.

Geology and Hydrogeology

The site is underlain by the Epler Formation of Ordovician age (Figure 3). This formation consists of thickly-bedded, medium-dark gray limestone interbedded with dolomite. Data from monitoring wells installed as part of the Underground Storage Tank ("UST") closure activities indicate that the depth to ground water in the northern part of the property ranges between 76 feet and 99 feet below top of casing ("btoc"). Water levels measured in February 2011 ranged between 80 feet and 85 feet btoc. During well installation, depth to bedrock was encountered between 18 feet and 30 feet below grade. Regional ground water flow directions within the formation are to the north-northeast.

According to a 2002 USGS report entitled "Geohydrology of Southeastern Pennsylvania", the following hydrologic properties of the Epler Formation were obtained from various domestic wells. Median values are provided in italics.

Reported Yields of 0.5 to 154 gpm	10 gpm = median
Specific Capacities of 0.2 to 14 gpm/ft	0.99 gpm/ft = median
Hydraulic Conductivities of 0.0 to 20 ft/day	0.99 ft/day = median
Transmissivities of 0.25 to 2,300 ft²/day	$220 \text{ ft}^2/\text{day} = \text{median}$

The USGS report identifies the greatest density of water bearing zones in these wells as being located between 151 feet and 200 feet below grade. Given the total depths of the monitoring wells installed at the Venezia terminal (80 feet to 98 feet), these values may be referring to hydrologic properties of a deeper, more productive aquifer within the formation.

Water Supply

Potable water supply to the property is currently provided by the Pennsylvania American Water Company Blue Mountain Division. One, former, onsite supply well is located on the property, along the eastern wall of the northern terminal building. Reportedly, this well is at least 200 feet deep with water levels ranging from 85 feet to 99 feet btoc. It

remains unclear as to whether or not this well was ever utilized as a potable water source or for other site operations.

According to URS's 2007 database search of the Pennsylvania Groundwater Information System ("PAGWIS"), 23 private water supply wells were located within a one mile radius of the Site and six wells were located within ½ mile of the Venezia terminal. Reportedly, of those six wells, three are domestic wells, two are supply wells, and one is unused. The three domestic wells have reported depths ranging from 165 feet to 250 feet and are owned privately. The remaining three wells have reported depths of 140 feet to 200 feet and are owned by the cement company.

Surface Water

As mentioned above, the southern property boundary is lined by a small drainage ditch that extends to an un-named tributary to Bushkill Creek. The small creek is reportedly intermittent in its flow and is within the 100-year flood plain.

Northeast of the Venezia facility lies a larger, surface water body (approximately 3/4 mile long, running west to east) adjacent to the cement quarry. A smaller body of water that appears to be man-made, exists on the northern side of Route 248 within the confines of the cement plant, and may be used in quarry operations. According to aerial images, two ponds can also be located due east of the cement plant, within a slightly wooded area.

<u>Soils</u>

The United States Department of Agriculture ("USDA") Web Soil Survey ("WSS") classified soils beneath the Site as "Urban Land" with 0 to 8 percent slopes ("UkaB"). Figure 4A presents a broad-view Soil Map that includes the Venezia terminal and surrounding soils/water bodies. Figure 4B presents a more detailed map of the soils that surround the facility itself, including: Clarksburg Silt Loams ("ClA" and "ClB"); found on broad "toe slopes", large sinks, flat basins, and in drainage ways; Duffield Silt Loams ("DuA"); and Washington Silt Loams ("WaB"). Generally, these soils belong to the Washington-Urban land association, consisting of nearly level to sloping, deep, well drained soils underlain by thin glacial till over cavernous limestone.

Reportedly, these soil units (mentioned above) typically range anywhere from 3 to 20 acres in size. Clarksburg soils have slow permeability and a high seasonal water table, creating ponding and flooding during periods of heavy rainfall. The Duffield Silt Loams are found on broad, smooth, upland areas, and are generally the result of material weathered from impure limestone.

Maps of some of the pertinent, physical characteristics of each localized soil type, such as pH, organic matter content, cation exchange values, and saturated hydraulic conductivity values were created using the WSS online program and are provided as attachments (Figures 5, 6, 7, and 8, respectively). Brief descriptions of each soil property are also included on the last page of each figure set.

During EDN's 2010 Soil Investigation, onsite soil borings were classified as very dense, dark brown to black, dry to moist clays. Additionally, a review of the USDA's Natural Resources Conservation Service's ("NRCS's") National Hydric Soils List for Northampton County, Pennsylvania (Table 1) did not reveal any matches between the Site soils, and those that exhibit hydric characteristics (formed under conditions of saturation, flooding, or ponding long enough to develop anaerobic conditions). However, according to the Lehigh Valley Planning Commission ("LVPC"), hydric soils may exist east of the Venezia terminal, along the 100-year flood plain (Figure 9).

2.2 Local Population Characteristics

According to the LVPC, Lower Nazareth Township had a population of 5,259 residents in 2000 with a 2010 forecast of 7,085 (official 2010 Census count not yet tallied). Conversely, the LVPC also indicated that the Township's Residential Building Permits had declined rapidly between 2005 and 2009, dropping from 72 to 9, in that respective time frame. Nazareth Borough, the center of which is located approximately 3/4 mile northwest of the terminal entrance, had population counts of 6,023 and 6,103 in 2000 and 2010, respectively.

A small, commercial/business park resides approximately 150 yards west of the terminal property off of Jandy Boulevard. The large cement company/quarry lies to the north, on the northern side of Route 248. The number of workers currently employed by these facilities is unknown.

The LVPC also designated the streams that are nearest to the Venezia facility (to the north, east, and south) as habitats for Warm Water Fish populations (Figure 10).

2.3 Land Use and Activity Patterns

The Venezia facility is a commercial trucking terminal and will remain as such in the future. Site occupants are generally employees and visitors who frequent the property during a typical 8 to 10 hour work day. Truck drivers are usually onsite for shorter periods of time, dropping off or picking up various trailers outside, and perhaps resting briefly indoors. Maintenance workers and tenants spend most of their time inside one of the two buildings onsite. While site access is not restricted by any gates, fencing, or security, subpopulations such as trespassers, children, pregnant and nursing women, and people with chronic illnesses are not expected to frequent the site.

Although some of the surrounding agricultural land is subject to residential and/or commercial development in the future, the Northampton County Farmland Preservation Program has designated hundreds of acres of farmland south of the terminal property as farmland preservation areas through agricultural conservation easements. By offering financial incentives and security of land use, Pennsylvania Act 149 of 1988 encourages landowners to make long-term commitments to agriculture, thereby protecting any viable lands from development or for any purpose other than agricultural production. Figure 11 shows that a large portion of land south of the Venezia property has been zoned off

accordingly. As such, most of the terminal's surrounding agricultural land is expected to remain undeveloped.

3.0 Site Investigation

For the purposes of this Report, only the portions of EDN's Site Investigation pertaining to the former lagoons are discussed below. Results of the complete site investigation can be found in their entirety in the "Venezia-Nazareth Trucking Terminal Site Investigation Report", submitted to the USEPA and PADEP in August 2010.

3.1 Surface Geophysical Investigation

EDN subcontracted the services of Geo-Graf, Inc. ("GGI") in December 2009 to conduct a non-intrusive, surface geophysical investigation to confirm the location and dimensions of the two former wastewater lagoons and associated subsurface wastewater conveyance piping. The investigation was performed in an area measuring approximately 150 feet by 450 feet and included the collection and interpretation of data generated from Ground Penetrating Radar ("GPR"), utilizing 200 and 400 megahertz ("MHz") antenna systems, Electromagnetic ("EM") instrumentation, Radio Frequency ("RF") instrumentation, and Magnetic ("MAG") instrumentation when applicable. Data obtained from this investigation can be seen in the Figure 2 Site Map.

According to the GPR data signatures collected onsite, the locations of the two suspected wastewater lagoons were positively confirmed. The lagoons were identified immediately south of the dirt mound near the center of the property. The northern-most lagoon measured approximately 20 feet by 24 feet, and the southern-most lagoon measured approximately 20 feet by 28 feet. Connecting the lagoons in a north-south direction were three pipes, each approximately 10 feet long. The top of each lagoon was estimated to be 4 feet below ground surface ("bgs") with a maximum depth of 8 feet bgs. A crosssection of the northern-most lagoon can be seen in a GPR data profile, presented as Figure 12. Field markings of the perimeters of each lagoon at the surface can also be found in the Site Photographs Appendix.

A utility pole with a control box attached and a vault made of cinder blocks were also located on and within the dirt mound, respectively. It is suspected that the underground piping had been connected to the lagoons by some type of distribution feature, possibly located within the center of this mound.

3.2 Soil Investigation

From January 28 through February 2, 2010, EDN installed a total of fourteen (14) soil borings on the property using Geoprobe® direct push methodology. Five (5) of the borings were advanced successfully in the vicinity of the two, former lagoons to investigate the presence of regulated substances in soil.

The target depth of each boring was based on the findings of the geophysical investigation which determined the depth of the former lagoons to be approximately 8 feet bgs. The soil borings were advanced to a maximum depth of 20 feet bgs or refusal, whichever was reached first, using 2-inch diameter, 4-foot long macro-cores with acetate liners.

Each soil boring was field screened for evidence of VOCs using a photo-ionization detector ("PID"). In addition, the subsurface materials penetrated by the soil borings were logged in the field relative to color, soil type, moisture content, and grain size. One sample was collected from each soil boring based on PID screening. If no PID response was noted, a sample was collected from the top two feet of penetrated material ("surface" soil). Following the sampling, each boring was backfilled with bentonite chips to grade.

Equipment decontamination was performed at each soil boring location prior to the advancement of each boring. All Geoprobe® core barrels and non-disposable sampling equipment was washed with a solution of Liqui-nox and water and rinsed with distilled water, collected in 5-gallon buckets, and later containerized in a 55-gallon drum, along with the soil cuttings.

Samples were analyzed for target compound list ("TCL") VOCs, TCL semi-volatile organic compounds ("SVOCs"), TCL polychlorinated biphenyls ("PCBs"), and target analyte list ("TAL") metals. One (1) trip blank sample was analyzed per cooler shipped and submitted to the laboratory as part of the Quality Control ("QC") program. All samples obtained during the investigation were shipped under chain-of-custody to Accutest Laboratories ("Accutest"), Pennsylvania Certification No.: 68-408, USEPA Federal ID No.: NJ00141. All laboratory analyses were completed by Accutest.

Upon receipt of the lab report(s), EDN subcontracted the services of Loeper Quality Assurance & Technical ("Loeper") to complete a Quality Assurance ("QA") Data Validation Report on the laboratory findings. The review was performed according to USEPA Region III Validation Guidance documents, with an M-1 review for organics and an IM-1 review for inorganics.

3.3 Soil Investigation Findings

The soil borings generally consisted of dark brown and black, dry to moist clays. This material was mostly fine and dense. The first 1 to 2 feet of penetration generally consisted of gravelly fill and/or stone cobbles. See Table 2 below for a complete list of sampling locations and depths. Appendix A includes soil boring logs from each of the five locations.

Table 2: Lagoon Soil Boring Locations and Sampling Depths			
Boring ID	Location	Sample Depth (feet bgs)	Total Depth (feet bgs)
SB-2	Between lagoons, west edge of piping	9	20
SB-3	Northeast corner of northern lagoon	12	12
SB-4	Between lagoons, east edge of piping	10	20
SB-5	East edge of dirt mound, next to piping	20	20
SB-6	Northwest edge of dirt mound	16	18.1

Equipment refusal occurred in two of the soil borings: 12 feet bgs in SB-3 and 18.1 feet bgs in SB-6. The installation of "SB-1" was attempted at five different locations in the south end of the southern-most lagoon; however, refusal was met with each attempt between 1 and 3 feet bgs with no recovery. Consequently, EDN chose to abandon that particular location.

During completion of SB-3, located in the northeast corner of the northern-most lagoon, EDN encountered a shallow pocket of perched water at 2 feet bgs. While it's not uncommon to find perched water at the overburden-bedrock interface, no bedrock was encountered during the installation of SB-3, and no other zone of shallow perched water was encountered in any soil boring near, upgradient, or downgradient from SB-3. As a result, EDN concluded that the perched water condition found at SB-3 was an isolated, localized condition that did not reflect regional groundwater trends or conditions and therefore, no water sample was collected.

A PID measurement was taken from the penetrated material at one foot intervals. Vapor readings were measured in parts per million (ppm) and ranged from 0.0 ppm to 180 ppm (SB-2 at 9 feet bgs). Higher measurements were generally accompanied by odors and/or black-stained soils. PID readings taken from SB-3 may not be accurate due to a mechanical problem within the instrument. As a result, the soil sample taken from SB-3 for laboratory analysis was obtained from its total depth of 12 feet bgs, below the suspected total depth of the lagoon (8 feet bgs).

Table 3 displays the laboratory analytical results for VOCs and TAL Metals found in the soil samples obtained from the lagoon area, compared to the PADEP, Act 2, SHS Medium Specific Concentrations ("MSCs") for a residential and non-residential, used aquifer. The same VOC results are presented graphically in the Figure 13 Tag Map. Laboratory results (attached as Appendix B) confirmed SHS exceedances in borings SB-2 (Benzene and Trichloroethene ("TCE")), SB-3 (TCE, cis-1,2-Dichloroethene ("DCE"), and Arsenic), SB-4 (Benzene, TCE, and Manganese), SB-5 (Benzene, Carbon Tetrachloride, and TCE), and SB-6 (TCE).

3.4 Data Validation

A laboratory Data Validation Report ("DVR"), including Data Summary Tables, is attached as Appendix C. The information included in the DVR is based on USEPA Region III Level M1 review of organic data for all samples according to the "Contract Laboratory Program ("CLP")-equivalent" deliverables format.

3.5 Site Investigation Conclusions

The surface geophysical investigation positively confirmed the existence of two former, unlined lagoons, conveyance piping, and other features used in the past to manage wastewater generated by operational activities. The soil investigation confirmed that historical releases of hazardous substances (VOCs and some Metals) occurred in the immediate vicinity of these lagoons and associated features.

The concentration of TCE, a chlorinated solvent, exceeded the SHS in samples obtained from each soil boring advanced in the lagoon area. Benzene, an aromatic hydrocarbon, was detected in concentrations in excess of the SHS in three (3) samples. Both compounds were identified in the list of chemicals, likely present in the wastewater generated from truck washing operations during CLTL's ownership (Table 4).

Cis-1,2-DCE was also detected in each sample. However, an exceedence only occurred in SB-3. This compound is an intermediate daughter product of the reductive dechlorination of TCE, and indicates that biological degradation of chlorinated ethenes is occurring onsite, possibly assisted by the presence of Benzene as an electron donor.

Carbon Tetrachloride (also a chlorinated solvent) was identified in SB-5 and exceeded the SHS. It should be noted that daughter products of Carbon Tetrachloride include Chloroform and Methylene Chloride, both of which were identified in SB-2 and SB-3, but not exceeding the standard. Chloroform was found in 4 out of 5 soil borings. The presence of these compounds further suggests that biodegradation is occurring.

The nature and extent of these chemical impacts are inconsistent with Venezia's operations at this facility, the transport of non-hazardous bulk solids. The data indicates a strong correlation between historical wastewater management practices and detected chemical impacts. The presence of degradation products provides additional evidence that the VOC releases are historical in nature, occurring prior to Venezia's ownership.

In order to determine the extent of the chemical impacts on potential receiving media and localized populations, EDN performed a Human Exposure Pathway Analysis and an Ecological Screening to complete the Site Conceptual Model. The fate and transport of the compounds exceeding the SHS were addressed as well.

It is relevant to note that the concentrations of Arsenic in SB-3 and Manganese in SB-4, shown in **Table 3**, exceed the SHS established by PADEP in January 2011. However, the concentrations of these compounds did not exceed the historic SHS that were in effect at the time the soil investigation was conducted.

4.0 Human Exposure Pathway Analysis

According to the USEPA, an exposure pathway generally consists of four elements: a source and mechanism of chemical release, a retention or transport medium, a point of potential human contact with the contaminated medium (referred to as the exposure point), and an exposure route at the contact point.

Sources and Receiving Media

During the CLTL ownership, site operations included the cleaning of the interiors of tankers and trucks. Wastewater generated from this process flowed through an underground sewer line and was contained in two, unlined lagoons located near the center of the site. EDN's Soil Investigation focused on this AOC, which has been covered with gravel and stone/fill for nearly 40 years.

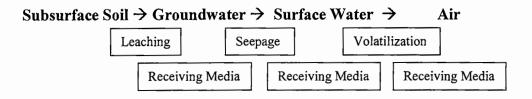
Laboratory results from the soil investigation confirmed the presence of Benzene, Carbon Tetrachloride, TCE, and cis-1,2-DCE in excess of the applicable SHS, in 5 out of 14 soil borings. All 5 borings were in the vicinity of the former lagoon area. Other volatile compounds including, but not limited to, Chlorobenzene, Chloroform, Ethylbenzene, Methylene Chloride, Tetrachloroethene ("PCE"), Toluene, and Xylene were also discovered in this area, but were present at concentrations below the SHS.

The impacted soils were discovered at depths of 9 to 20 feet bgs, which is below the estimated total depth of each lagoon (8 feet bgs). Surrounding surface soils (residing between 0 and 2 feet bgs) were not impacted; thereby eliminating much of the direct contact exposure scenarios.

To summarize the primary media exposure:



Without any further analysis, potential, future media exposures could include:



4.2 Contaminant Fate and Transport

<u>Benzene</u>

Benzene is a highly volatile, organic compound. It is moderately soluble in water and breaks down readily in the atmosphere from surface water. Benzene is highly mobile in soil; however, its leaching potential to groundwater is dependent on soil type, amount of rainfall, and depth to groundwater. The soils beneath the former lagoons consist of dense clays and are much shallower than the water table. Benzene has been shown to adsorb to aguifer solids provided that organic matter is present. The organic matter content of the soils surrounding the property range from 0.41 percent to 0.66 percent, and may not be sufficient for Benzene adsorption. Moreover, given the "moderately high" saturated hydraulic conductivity of the surrounding soils, there exists the potential for benzene migration.

Benzene does not bioaccumulate in marine organisms and therefore, does not appear to be of significant concern in the aquatic food chain. Studies suggest that since benzene exists primarily in the vapor state, vegetative contamination may be possible through the "air-to-leaf" exposure pathway.

Benzene will chemically degrade in the atmosphere in only a few days; possibly hours. When released to soil or water, benzene is subject to volatilization, photo-oxidation, and biodegradation. Generally, aerobic conditions are necessary for biodegradation to occur, which may be present onsite. According to some reports, biodegradation half-lives for benzene in surface water and groundwater were 16 and 28 days, respectively. Decay rates for benzene in soil vary, depending greatly on the amount of dissolved oxygen and concentrations present.

Inhalation is the primary pathway for human exposure, occurring mainly through active and second-hand tobacco smoke, contaminated air around heavy motor vehicle traffic, and around gas stations. If used for cooking or showering, contaminated tap water may also be inhaled after volatilizing. Ingestion of benzene-contaminated food or water is also possible. Dermal exposure is generally limited to those individuals who are exposed to benzene on a regular, occupational level.

Carbon Tetrachloride

Carbon Tetrachloride is a stable compound that degrades very slowly in the atmosphere. Because of its high vapor pressure, when released to the soil, carbon tetrachloride is expected to volatilize rapidly; possibly within a few days. Depending on soil characteristics and organic carbon content, the potential for migration exists. Carbon Tetrachloride is moderately soluble in water and tends to volatilize from tap water when used for cooking and showering.

Studies have shown that it is unlikely for carbon tetrachloride to bioaccumulate in aquatic or marine organisms.

Estimates of the atmospheric lifetime/oxidation of carbon tetrachloride vary, but most values range from 30 to 100 years. Biodegradation of carbon tetrachloride in water will occur more rapidly under anaerobic conditions (half-lives on the order of days to weeks) than under aerobic conditions (half-lives on the order of months). Carbon Tetrachloride may undergo reductive dechlorination when sulfide and ferrous ions are present, with chloroform (found within the soil borings) and dichloromethane as the primary transformation products.

Ambient air and drinking water are the two most common pathways through which the general population might be exposed. Carbon Tetrachloride exposure may also occur through dermal and inhalation routes if using contaminated tap water for household purposes (cooking, bathing, etc.).

TCE

TCE is a dense, non-aqueous phase liquid that can be transported in the atmosphere, groundwater, and soil. Its estimated half-life when degraded through photo-oxidation in the atmosphere is approximately 7 days. Because of its high vapor pressure, TCE deposited in surface waters or on soil surfaces is expected to volatilize rapidly into the atmosphere. TCE degrades very slowly within the subsurface and is moderately soluble in water. Volatilization of TCE in soil is slower than it is in water. Among other factors, actual volatilization rates are dependent upon temperature, water movement, air movement, and water depth.

TCE has a low tendency to bioaccumulate in the aquatic food chain. Some studies have shown that uptake of TCE through plant foliage is possible.

Reportedly, reductive dehalogenation is TCE's primary degradation process in water. Daughter products include cis-1,2 DCE and vinyl chloride. Biodegradation also seems to be a factor in degrading TCE in soil, increasing with the amount of organic content and vegetation present. Some evidence also suggests that TCE will degrade in the presence of aromatic hydrocarbons such as benzene and toluene which were both identified in soil borings.

Cis-1,2-DCE

Cis-1,2-DCE (an intermediate daughter product of TCE) is a volatile compound primarily found in the atmosphere and groundwater. According to studies, the cis isomer has a predicted atmospheric half-life of 12 days. When released to surface water, the isomer is rapidly volatilized (on the order of 5 to 6 hours in some instances). Cis-1,2-DCE also volatilizes rapidly from moist soil surfaces, and without significant adsorption to soil, it may leach through subsurface soils into groundwater where biodegradation (under anaerobic processes) occurs very slowly. Anaerobic biodegradation may also be the sole mechanism for cis-1,2-DCE to degrade in soil. Biodegradation of the cis isomer produces vinyl chloride (a known carcinogen) and chloroethane, neither of which was

apparent in the soil samples taken from the Site. [Vinyl Chloride was identified in SB-3, but at a concentration of 0.001 mg/kg]

The potential for the cis isomer to bioconcentrate in aquatic organisms is low.

Generally, human exposure occurs through ingestion, inhalation, and dermal contact with contaminated tap water; inhalation being the most probable route. Occupational exposure is by dermal contact of the liquid or through inhalation of the vapor.

4.3 Exposure Points

According to USEPA guidance, any point of potential contact with a contaminated medium is an exposure point. In this instance, the greatest concentration of contaminant lies within the subsurface soil, beneath and surrounding the former lagoon area, approximately 9 to 20 feet below the ground surface.

Simply based on proximity alone, it is reasonable to assume that the population most likely to come into contact with the impacted soil is the onsite employees, drivers stopping to load/unload trailers, and visitors to the facility. Given that the former lagoon area is now an open, gravel parking lot, in the center of the property, at least 350 feet from the nearest building structure, it is highly unlikely that any member of this population will be directly exposed to contaminants residing within the subsurface soils.

With regard to potential offsite exposures, the highest exposure concentrations often will be at the points closest to and downgradient or downwind of the Site. While surface topography indicates that runoff generally flows to the south toward the unnamed creek, available hydrogeologic data from historic monitoring wells in the northern portion of the property indicate that groundwater flows to the north-northeast.

Potential downgradient groundwater receptors within ½ mile of the Site would include the three remaining monitoring wells on the property, the three wells owned by the cement company north of Route 248 and the quarry lake north of the cement plant. A small body of water located within the cement plant, directly across the street from the Venezia terminal, is discussed in greater detail as part of the Ecological Screening.

4.4 Exposure Routes

Given the exposure points presented above, the following analysis focuses on exposure to adults, likely occurring during occupational activities. Residential and Recreational populations are not considered to be at risk.

Ingestion of, or Dermal Contact with, impacted Subsurface Soil

The impacted subsurface soils reside 9 to 20 feet below the ground surface in an area where the current land usage (parking lot) is not expected to change. Should a utility worker or environmental investigator come into contact with the subsurface soils, it is assumed that proper personal protective equipment ("PPE") will be utilized, and outdoor ventilation will be adequate. A complete exposure pathway does not exist.

Ingestion of, or Dermal Contact with, impacted Groundwater

Public water is currently supplied to the property as well as the residential homes downgradient in Nazareth Borough. Although unlikely, if the surrounding agricultural properties are developed, it is assumed that the public water service will be provided to these properties as well. Additionally, the former, onsite supply well that is present on the property, has been disconnected and is not utilized for a potable water source or for other site operations. And reportedly, supply wells north of the terminal, formerly used in quarry operations, have not been utilized for some time, and may never be. Therefore, the groundwater ingestion pathway is incomplete, given that there are no current or probable future users of groundwater (potable, industrial, or agricultural).

Dermal contact with potentially impacted groundwater, without appropriate PPE (i.e. contact by someone other than an environmental professional), is not expected to occur. The distance of the contaminated soil from the groundwater table also makes ingestion of contaminated groundwater unlikely.

Ingestion of, or Dermal Contact with, impacted Surface Water

Migration of a regulated substance from impacted soils to surface water would likely occur if the soils were located in the surface interval (0 to 2 feet bgs). In this instance, impacted soils are located within the subsurface, thereby making direct exposure to surface water improbable.

If the surface water found in the large lake north of the cement plant was affected through the seepage of impacted groundwater, it is very unlikely that the water would ever be used for any type of recreational activity (i.e. swimming, fishing, boating, etc.), again making direct exposure to surface water improbable. The surface water contained in Bushkill Creek and its tributaries is generally farther east of the Site (not downgradient) and should not be of concern. Additionally, none of the compounds tend to accumulate in fish or aquatic organisms; thereby, also eliminating any contaminant accumulation in the birds/mammals that consume them.

Inhalation of Chemicals from Volatilization of impacted Soil into Air

The physical characteristics of the Site soils appear to indicate that the compounds discussed above may be more likely to leach through the soil, rather than volatilize from it—at least from the subsurface depths indicated. These chemicals do volatilize rapidly from surface waters and soil surfaces, which are not a concern at this particular Site.

Inhalation of Chemicals from Volatilization of impacted Groundwater into Buildings

If contaminated groundwater was residing in the onsite monitoring wells at the north end of the facility, EDN concluded that by using the 2004 PADEP guidance for vapor intrusion into buildings from groundwater, indoor air is not considered to be a logical receiving media, primarily because of the very low water table (large separation between the source and an occupied structure) and the lack of sandy soils onsite.

Generally speaking, inhalation is the primary route of exposure for the compounds examined within this report. However, in order for this pathway to be complete, onsite buildings and/or residential homes would have to be supplied with contaminated tap water, or very near the groundwater table, neither of which applies in this case, presently or in the near future.

4.5 Conclusions

The human exposure pathways identified above have been investigated and found to be incomplete. However, a main focus of concern lies with the dermal, ingestion, and inhalation exposure routes that involve groundwater usage onsite and at downgradient properties. Although potable water is supplied to these properties now, existing supply wells still remain open. Therefore, hypothetically, a potential exists for a complete exposure pathway to exist if contaminant migration to the groundwater occurs. However, the available data indicates that a significant buffer, on the order of 60 feet in some areas of the property, exists between the residual impacted soil and the water table.

Regardless, at least one institutional control will likely have to be established to prevent localized groundwater from being used, thereby ensuring that these pathways remain incomplete.

5.0 Ecological Screening / Risk Assessment

In order to evaluate the threat, if any, posed by the impacted media onsite to habitats and species of concern, EDN consulted the USEPA's Ecological Risk Assessment Guidance document designed for conducting site-specific ecological risk assessments. Results from the initial screening are found below.

Site Characteristics

The former lagoon area was, reportedly, backfilled in 1973 with crushed stone and overlaid with gravel. The Site has served as a parking lot for trailers and trucks for nearly 40 years with a small dirt mound (approximately 20 feet in diameter, just north of the former lagoons) serving as the only location where remote vegetation and/or fauna could potentially thrive. Existing vegetation presently includes native grasses and weeds (see Site Photographs). No birds or mammals were identified as living in this area during the site characterization; likely due to the amount of truck traffic that frequents the lot.

A small un-named tributary to Bushkill Creek, located south of the facility's property line may also serve as a potential home to warm water fish (as defined by the LVPC) and local wildlife. A downgradient surface water body, located within the confines of the cement plant, approximately 300 yards northeast of the Site, was identified by the U.S. Fish and Wildlife Service's National Wetland Inventory as a "freshwater pond" classified as man-made, non-tidal wetland, with an unconsolidated bottom. Conversely, the aerial imagery seen in Figure 14 suggests that the "pond" may actually be used for industrial purposes and not necessarily a home to fish and wildlife. Figure 14 also shows a misrepresentation of the larger body of water to the northeast, indicated by the misalignment of one of its wetland features, suggesting that the data is either outdated, or, as the U.S Fish and Wildlife Service explains in its footnote, inaccurate.

Reportedly, the NRCS's National Hydric Soils List is used most frequently in making preliminary wetland determinations. As stated earlier, **Table 1** did not reveal any matches between the soils beneath and surrounding the Site, and those that exhibit hydric characteristics. This may suggest that the "freshwater pond" in question is not characterized appropriately.

Ecotoxicity of Contaminants

Although the contaminants present within the subsurface soils of the Site do not readily accumulate in plants or animals, both populations (in a historic and generalized sense) have been found to be adversely affected from various routes and frequencies of exposure, as listed below:

Benzene: Readily absorbed by animals through all natural routes of exposure (inhalation, ingestion, and dermal). Metabolism is assumed to take place in the liver, with secondary metabolism occurring in the bone marrow, a major toxicity target.

Carbon Tetrachloride: Readily absorbed by animals through all natural routes of exposure. The major target organs are the liver and kidney, as well as the nervous system during acute inhalation exposure.

TCE: Inhalation and ingestion are the primary exposure routes. According to the Agency for Toxic Substances and Disease Registry ("ATSDR"), TCE is readily absorbed into the bloodstream, regardless of its route, and then distributed to its target organs including the liver, heart, and central nervous system. Some studies have shown that uptake of TCE through plant foliage is also possible.

Cis-1,2-DCE: Data are very limited for animal exposures. Some studies suggest that the compound can be eliminated quickly through the kidneys. Inhalation and ingestion routes seem to be the most concerning, with liver, blood, and nervous system end points occurring in rats and mice.

Potential Ecological Impact / Pathway Elimination

Impacted soils within the former lagoon area reside within the subsurface. Surface soils did not contain any compounds in excess of the residential, SHS and are not considered to be a source for adverse ecological impact, either through dust inhalation by mammals or ingestion of surface

water at the southern end of the property through run-off. Although improbable, small mammal dermal contact within the surface layer (primarily gravel) does not pose a threat.

The root systems of the grasses (and former trees), residing within the dirt mound, above the ground surface are not expected to reach the 9-foot subsurface level, let alone the 2-foot surface interval; thereby preventing any direct contact with, or uptake from, the impacted soil. Herbivorous mammals would, therefore, not be exposed to the contaminants through their diets because the plants are not expected to be impacted.

EDN has found no evidence suggesting that potentially sensitive habitats exist downgradient. The water body classification identified as a "freshwater pond", located just north of Route 248 by the National Wetland Inventory is subject to an alternate interpretation and not believed to be a realistic receptor via groundwater seepage. Furthermore, because none of the compounds onsite tend to accumulate in fish or aquatic organisms, it is reasonable to believe that no risk is posed to the animals that drink the surface water or consume aquatic prey.

Conclusions

The ecological exposure pathways identified above have been investigated and found to be incomplete for potential contact with the impacted subsurface soil. In terms of the screeninglevel ecological risk assessment, no adverse effects on local habitat populations, if present at all, are likely. Potential endpoints were not evaluated any further.

6.0 Conclusions and Recommendations

This report has presented the results of a Remedial Investigation conducted by EDN at the Venezia trucking terminal in Lower Nazareth Township, Northampton County, Pennsylvania. The focus of the investigation was on an area near the center of the site, formerly occupied by two, unlined lagoons. These lagoons contained hazardous wastewater generated from the cleaning of the interiors of tankers and trucks, by CLTL, prior to Venezia's ownership.

A surface geophysical investigation positively confirmed the existence and location of the lagoons, conveyance piping, and other features used to manage the wastewater pathway. EDN's soil investigation confirmed that historical releases of hazardous substances occurred in the immediate vicinity of theses lagoons and associated features. Laboratory results identified the presence of four (4) volatile organic compounds within the subsurface soil layer that exceeded Statewide Health Standards; including Benzene, Carbon Tetrachloride, TCE and Cis-1,2 DCE. Arsenic and Manganese were also found in exceedence of the SHS, specifically in SB-3 and SB-4, respectively.

Benzene is an aromatic hydrocarbon compound. TCE and Carbon Tetrachloride are chlorinated solvents. Cis-1,2-DCE can be an intermediate daughter product of the reductive dechlorination of TCE. Other compounds were also identified, including additional daughter products: however, their concentrations were below the applicable standard.

EDN performed a Human Exposure Pathway Analysis and an Ecological Screening in order to determine the extent of these chemical impacts on potential receiving media and localized populations. The necessary exposure pathways were investigated, and none was found to be complete. However, this determination was based on the assumption that the groundwater aguifer beneath the Site and surrounding properties is not currently used, or will be used in the future for potable needs because all water users onsite and downgradient of the facility are being served by a public water system and that the actual potential for migration is minimal.

Default contaminant fate and transport considerations were also used in a USEPA online screening level calculator for "Worker" and "Soil to Groundwater" soil exposure scenarios. Results of the screening, as well as the default calculator inputs, are included as Appendix D. Screening levels for soil under the "Worker" classification did not indicate that a significant risk was posed to individuals working onsite. Conversely, "Soil to Groundwater" screening levels (both Risk-Based and Maximum Contaminant Level ("MCL")-based) did present a risk. Therefore, EDN has recommended the following institutional control below, to be established onsite in order to protect future populations from using the localized groundwater.

7.0 Postremedial Obligations

Pursuant to the remedial and site investigation activities completed herein, EDN has concluded that the impacted subsurface soils found in the vicinity of the former lagoon area have attained the Site-Specific Standard through pathway elimination. The following institutional control will be implemented to ensure that the *groundwater* exposure pathways remain incomplete.

Activity and Use Limitation ("AUL")

An AUL will be implemented to prohibit the use of groundwater for potable purposes on the property. If the Department deems it necessary, the property owner (and future property owners) can submit written documentation to the Department stating whether or not the AUL is currently in tact or that a property transaction is likely to take place. Property owners may choose to perform additional investigations to confirm attainment of a more stringent remediation standard in an effort to terminate the AUL.

An Environmental Covenant will be executed pursuant to the Pennsylvania Uniform Environmental Covenants Act ("UECA"), Act 68 of 2007, 27 Pa. C.S. §§ 6501-6517, that will subject the property to the AUL documented above. A draft of this Environmental Covenant is attached as Appendix E.

8.0 Signatures

The following party participated in the environmental evaluations conducted onsite and is seeking a release of liability for soil at the Venezia Enterprises property located at 3987 Easton-Nazareth Highway/Route 248 in Lower Nazareth Township, Northampton County, Pennsylvania.

Remediator and Owner:

Venezia, Inc.

86 Airport Road

Pottstown, PA 19464

P.O. Box 909

Royersford, PA 19468

Signature:

Edward B. Kern, Chief Financial Officer

Venezia, Inc.

Date:

9.0 References

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10.0 Figures

Figure 1: Site Location Figure 2: Site Plan

Figure 3: Geology of Nazareth, PA Figure 4A: Site Soil Map (broad)

Figure 4B: Site Soil Map (zoom)

Figure 5: Site Soil pH

Figure 6: Site Soil Organic Matter

Figure 7: Site Soil CEC Figure 8: Site Soil K_{sat}

Figure 9: Site Floodplain Map Figure 10: Site Stream Map

Figure 11: Act 149 Conservation Easement Map

Figure 12: GPR Data Profile, Lagoon Figure 13: Soil Boring Tag Map

Figure 14: Wetlands Aerial

11.0 Appendices

Appendix A: Soil Boring Logs

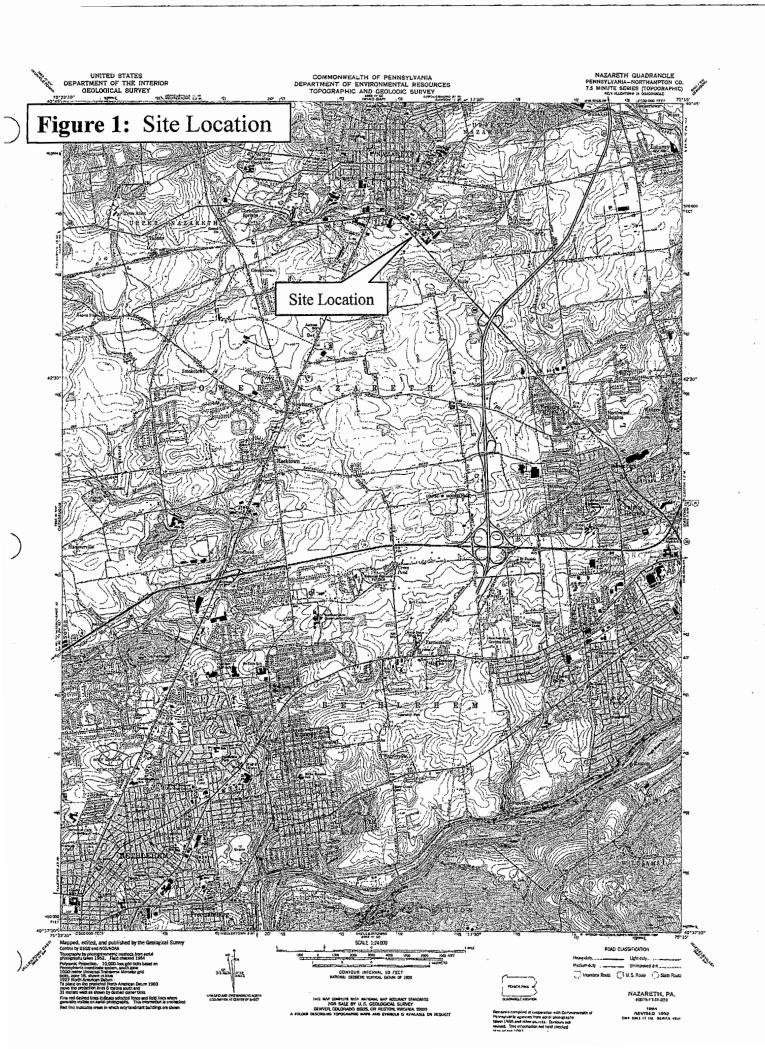
Appendix B: Lab Report

Appendix C: Data Validation Report

Appendix D: Risk-Based Screening Levels and Inputs for Soil

Appendix E: Environmental Covenant

^{*} Tables and Site Photographs are attached as separate Appendices.



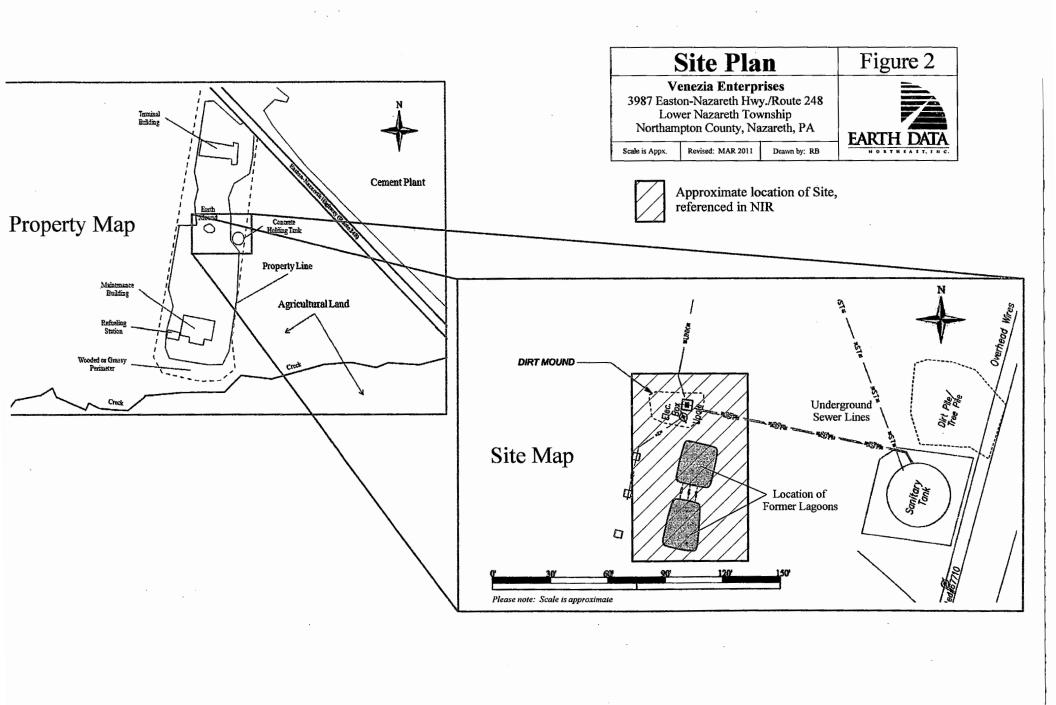
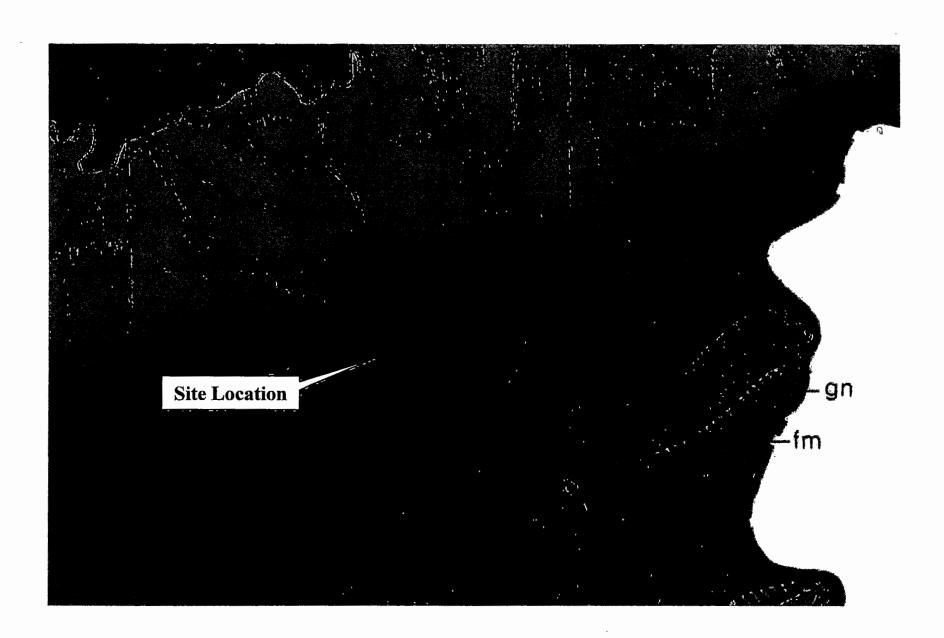
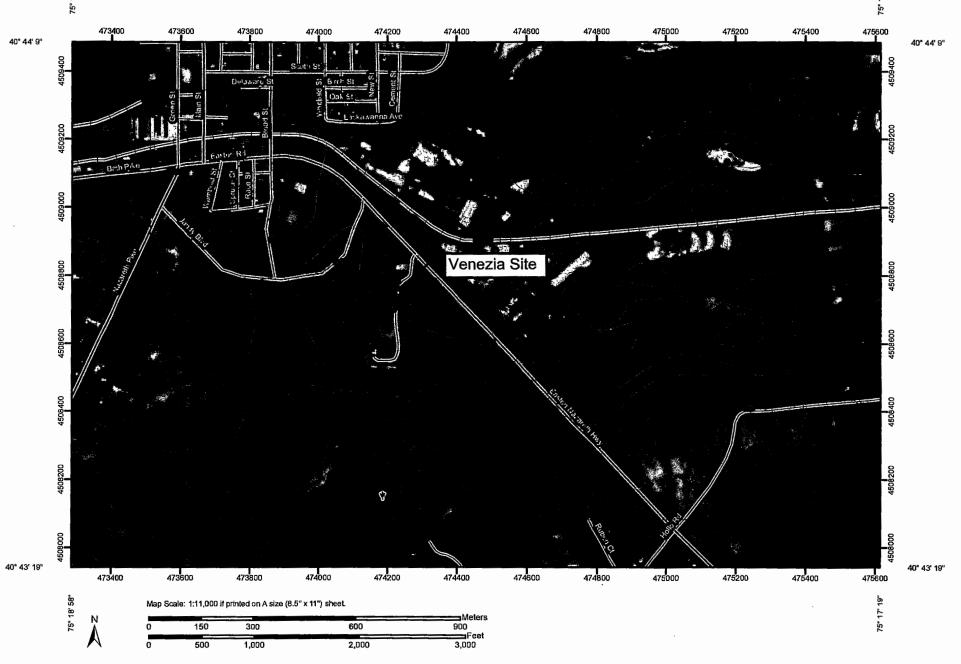


Figure 3: Geology of Nazareth, PA

Adapted from the 1980 Geologic Map of Pennsylvania—Commonwealth of Pennsylvania, DCNR





USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey 2/23/2011 Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout \odot

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

٨ Gravelly Spot

Landfill

Lava Flow Marsh or swamp

Mine or Quarry

0 Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

. .

Gully

Short Steep Slope

Other

Political Features

Cities ٥

Water Features

2

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:11,000 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Northampton County, Pennsylvania Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

	Northampton/County, Pennsylv	ania (PA095)	
Map Unit Symbol		Acres in AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	56.4	9.6%
CIB .	Clarksburg silt loam, 3 to 8 percent slopes	57.5	9.8%
DuA	Duffield silt loam, 0 to 3 percent slopes	25.7	4.4%
PQ	Pits, quarries	16.3	2.8%
UbB	Udorthents, limestone, 0 to 8 percent slopes	38.5	6.6%
UkaB	Urban land, 0 to 8 percent slopes	113.9	19.4%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	18.8	3.2%
UoD .	Urban land-Duffield complex, 8 to 25 percent slopes	10.6	1.8%
W	Water	50.5	8.6%
WaA	Washington silt loam, 0 to 3 percent slopes	9.3	1.6%
WaB	Washington silt loam, 3 to 8 percent slopes	170.2	29.0%
WaC	Washington silt loam, 8 to 15 percent slopes	19.6	3.3%
Totals for Area of Interest		587.3	100.0%

Soil Map—Northampton County, Pennsylvania (Figure 4B: Site Soil Map) 75" 18' 29" 75° 18' 8" Map Scale: 1:3,100 if printed on A size (8.5" x 11") sheet. Meters 150 Feet 600

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

مله Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

V Kock Outdrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Spoil Area

Stony Spot

CLIAD

Yery Stony Spot

Wet Spot

Other

Special Line Features

Gully (

Short Steep Slope

Other

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

~

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:3,100 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

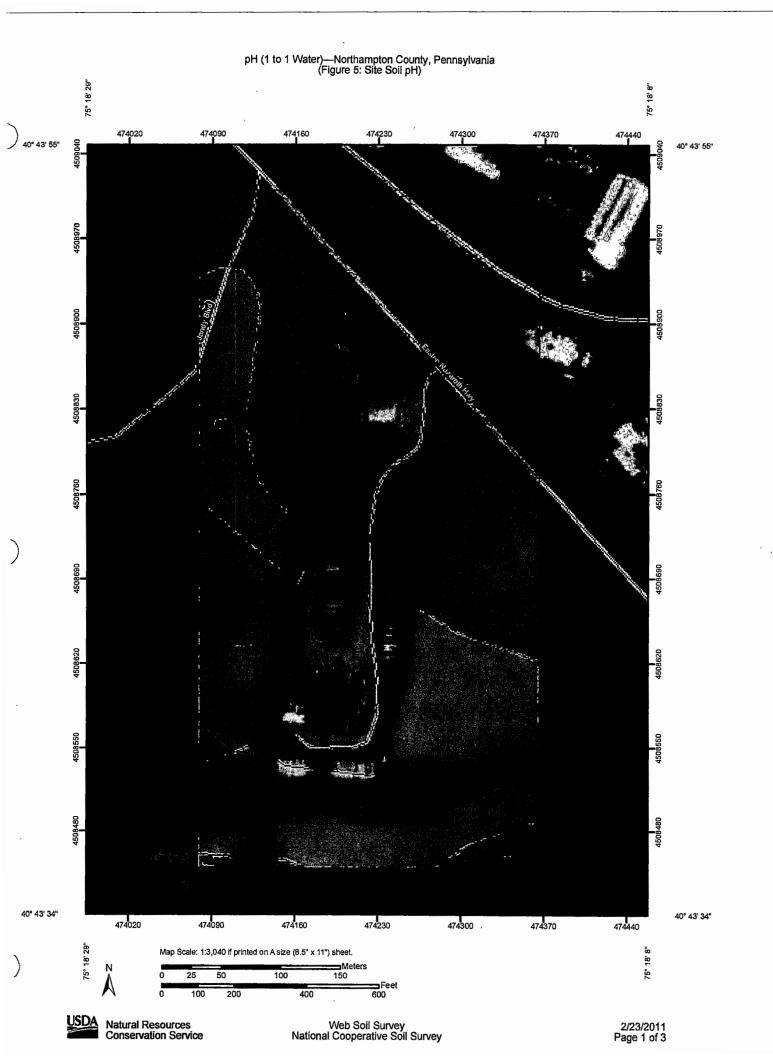
Soil Survey Area: Northampton County, Pennsylvania Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

	Northampton County, Pennsyl	vania (PA095)	North Saltings State
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	9.8	21.4%
CIB	Clarksburg silt loam, 3 to 8 percent slopes	4.2	9.1%
DuA	Duffield silt loam, 0 to 3 percent slopes	9.4	20.5%
UkaB	Urban land, 0 to 8 percent slopes	11.8	25.8%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	4.4	9.5%
WaB	Washington silt loam, 3 to 8 percent slopes	6.3	13.7%
Totals for Area of Interest	L .	45.8	100.0%



MAP LEGEND

Area of Interest (AOI) **Political Features** Area of Interest (AOI) Cities Soils Water Features Soil Map Units Oceans Soil Ratings Streams and Canals Ultra acid (ph < 3.5) Transportation Extremely acid (pH 3.5 -Rails 4.4) Interstate Highways Very strongly acid (pH 4.5 - 5.0) **US Routes** Strongly acid (pH 5.1 - 5.5) Major Roads Moderately acid (pH 5.6 -Local Roads 6.0) Slightly acid (pH 6.1 - 6.5) Neutral (pH 6.6 - 7.3) Slightly alkaline (pH 7.4 -7.8) Moderately alkaline (pH 7.9 - 8.4) Strongly alkaline (pH 8.5 -9.0)

Very strongly alkaline (pH > 9.0)
Not rated or not available

MAP INFORMATION

Map Scale: 1:3,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Northampton County, Pennsylvania Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

pH (1 to 1 Water)

and the second	pH (1 to 1 Water)— Summary by Mar	Unit — Northampton	County, Pennsylv	ania
- Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	5.8	8.8	22.1%
CIB	Clarksburg silt loam, 3 to 8 percent slopes	5.8	3.0	7.5%
DuA	Duffield silt loam, 0 to 3 percent slopes	6.2	8.5	21.4%
UkaB	Urban land, 0 to 8 percent slopes		11.4	28.5%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	6.2	4.2	10.6%
WaB	Washington silt loam, 3 to 8 percent slopes	6.5	3.9	9.8%
Totals for Area of Int	erest		39.9	100.0%

Description

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion. In general, soils that are either highly alkaline or highly acid are likely to be very corrosive to steel. The most common soil laboratory measurement of pH is the 1:1 water method. A crushed soil sample is mixed with an equal amount of water, and a measurement is made of the suspension.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

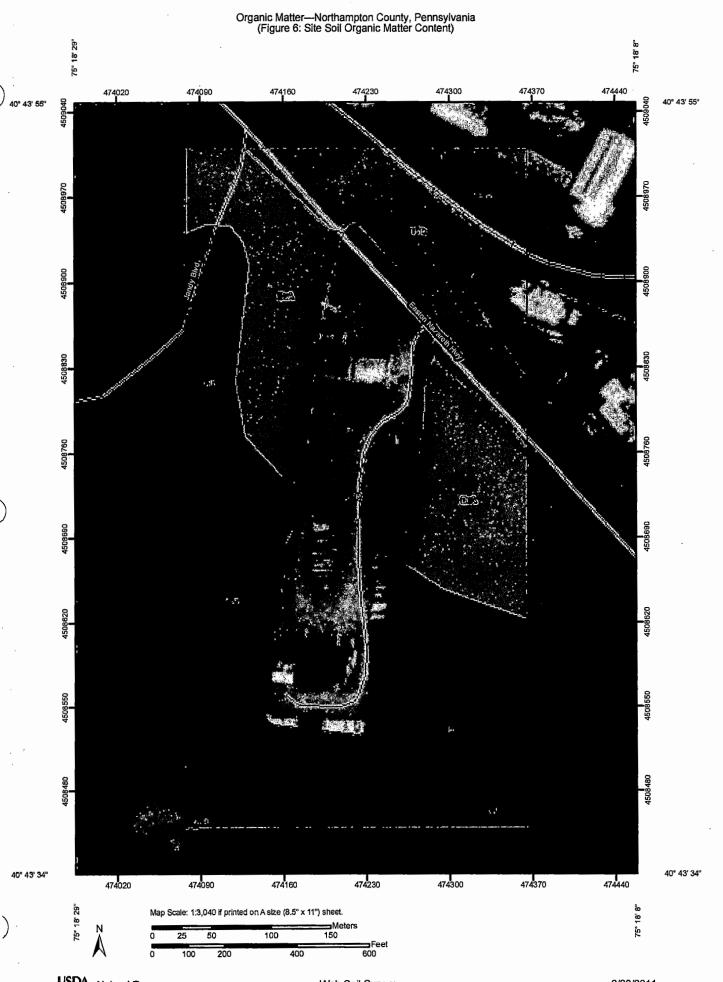
Aggregation Method: All Components

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options: All Layers



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

2.5

<= 0.41

\$7.90\f

> 0.41 AND <= 0.63

;

> 0.63 AND <= 0.66

22

Not rated or not available

Political Features

0

Cities

Water Features

,

Oceans

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Streams and Canals

Transportation

Rails

-

Interstate Highways

. .

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:3,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

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Soil Survey Area: Northampton County, Pennsylvania Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Organic Matter

	Organic Matter— Summary by	Map Unit — Northampton Cou	nty, Pennsylvania	
Map unit symbol	, Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	0.41	8.8	22.1%
CIB	Clarksburg silt loam, 3 to 8 percent slopes	0.41	3.0	7.5%
DuA	Duffield silt loam, 0 to 3 percent slopes	0.63	8.5	21.4%
UkaB	Urban land, 0 to 8 percent slopes		11.4	28.5%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	0.63	4.2	10.6%
WaB	Washington silt loam, 3 to 8 percent slopes	0.66	3.9	9.8%
Totals for Area of I	nterest		39.9	100.0%

Description

Organic matter is the plant and animal residue in the soil at various stages of decomposition. The estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms. An irregular distribution of organic carbon with depth may indicate different episodes of soil deposition or soil formation. Soils that are very high in organic matter have poor engineering properties and subside upon drying.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: percent

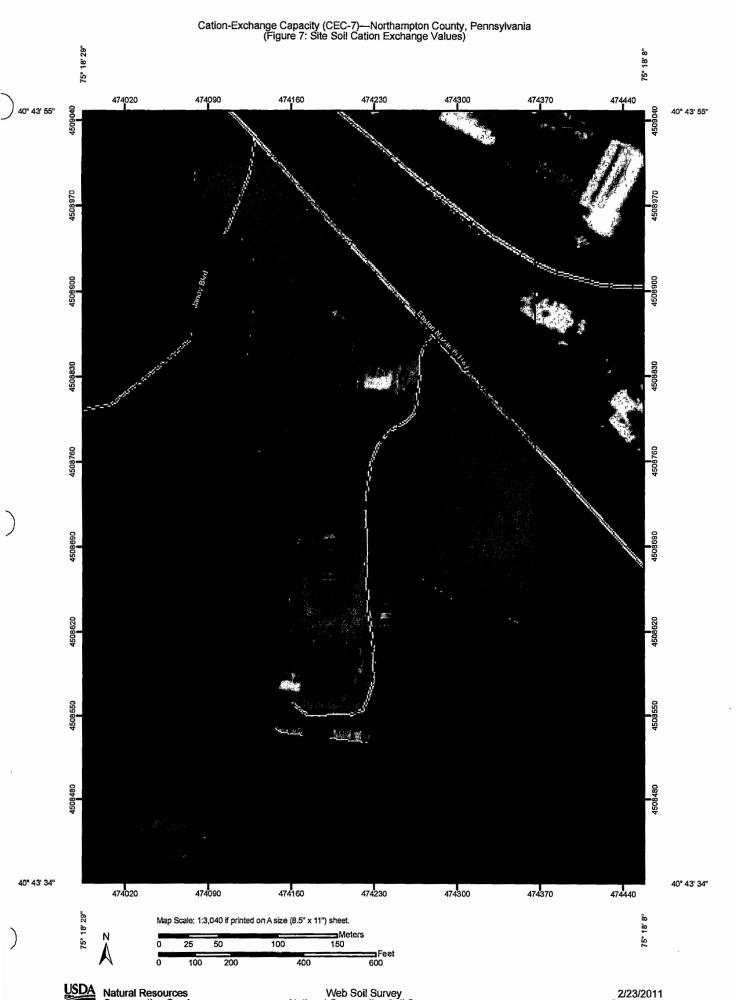
Aggregation Method: All Components

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options: All Layers



USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

<= 12.4

2.0

> 12.4 AND <= 15.2

į i

> 15.2 AND <= 19.2

Not rated or not available

Political Features

0

Cities

Water Features

.

Oceans

~

Streams and Canals

Transportation

Rails

~

Interstate Highways

مرسر

US Routes

**

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:3,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov

Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Northampton County, Pennsylvania Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Figure 7: Site Soil Cation Exchange Values

Cation-Exchange Capacity (CEC-7)

Cal	tion-Exchange Capacity (CE	C-7)— Summary by Map Unit — Northampton (County, Penns	/Ivania
Map unit symbol	Map unit-name	Rating (milliequivalents per 100 grams)	Acres in AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	19.2	8.8	22.1%
CIB	Clarksburg silt loam, 3 to 8 percent slopes	19.2	3.0	7.5%
DuA	Duffield silt loam, 0 to 3 percent slopes	15.2	8.5	21.4%
UkaB	Urban land, 0 to 8 percent slopes		11.4	28.5%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	15.2	4.2	10.6%
WaB	Washington silt loam, 3 to 8 percent slopes	12.4	3.9	9.8%
Totals for Area	of Interest		39.9	100.0%

Description

Cation-exchange capacity (CEC-7) is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

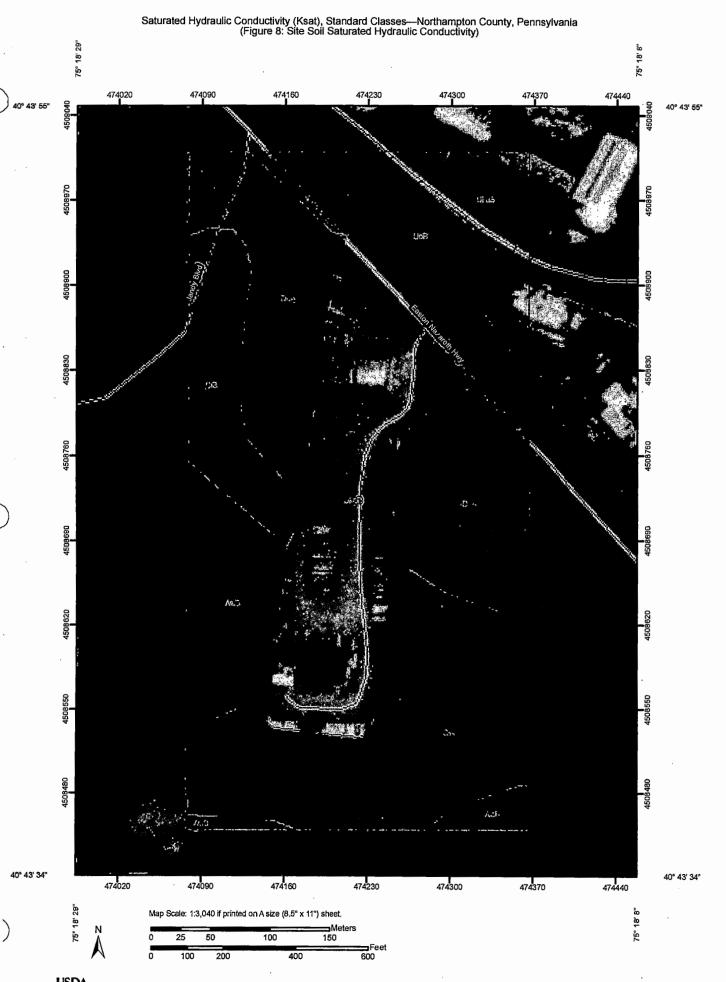
Rating Options

Units of Measure: milliequivalents per 100 grams

Aggregation Method: All Components

Component Percent Cutoff: None Specified

Tie-break Rule: Higher Interpret Nulls as Zero: No Layer Options: All Layers



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

Very Low (0.0 - 0.01)

Low (0.01 - 0.1)

Moderately Low (0.1 - 1)

Moderately High (1 - 10)

High (10 - 100)

Very High (100 - 705)

Not rated or not available

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:3,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Northampton County, Pennsylvania - Survey Area Data: Version 3, May 7, 2008

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Saturated Hydraulic Conductivity (Ksat), Standard Classes

	Land Company		Sauthar Control	
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres In AOI	Percent of AOI
CIA	Clarksburg silt loam, 0 to 3 percent slopes	4.5458	8.8	22.1%
CIB	Clarksburg silt loam, 3 to 8 percent slopes	4.5458	3.0	7.5%
DuA	Duffield silt loam, 0 to 3 percent slopes	9.1700	8.5	21.4%
UkaB	Urban land, 0 to 8 percent slopes		11.4	28.5%
UoB	Urban land-Duffield complex, 0 to 8 percent slopes	9.1700	4.2	10.6%
WaB	Washington silt loam, 3 to 8 percent slopes	13.5426	3.9	9.8%
Totals for Area of	Interest		39.9	100.0%

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits. The classes are:

Very low: 0.00 to 0.01

Low: 0.01 to 0.1

Moderately low: 0.1 to 1.0 Moderately high: 1 to 10

High: 10 to 100

Very high: 100 to 705

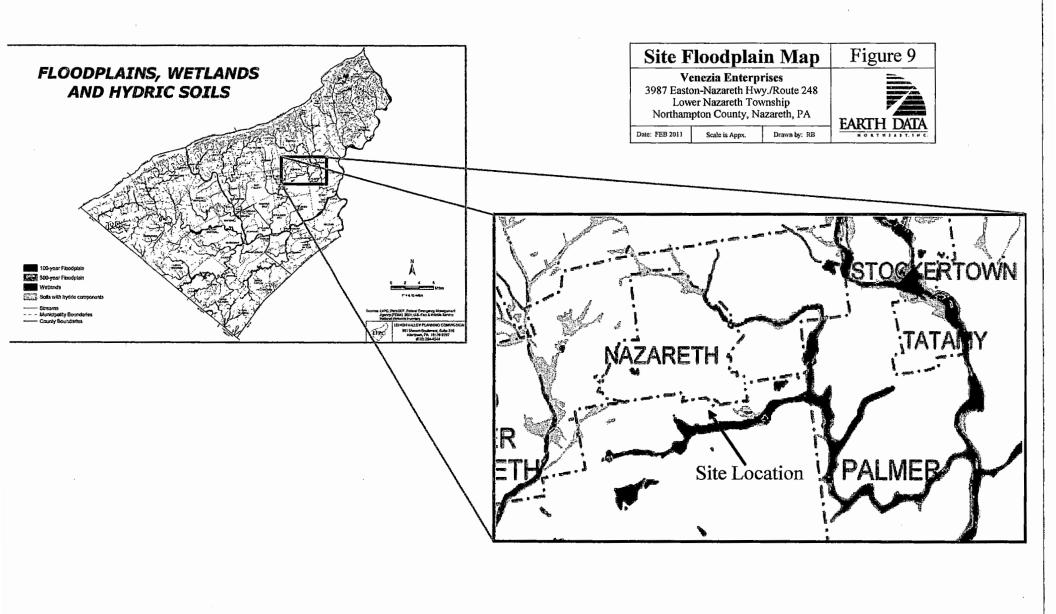
Rating Options

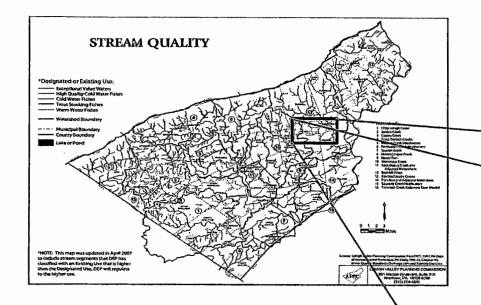
Units of Measure: micrometers per second

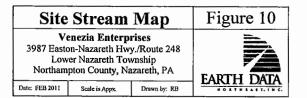
Aggregation Method: All Components

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest Interpret Nulls as Zero: No Layer Options: All Layers







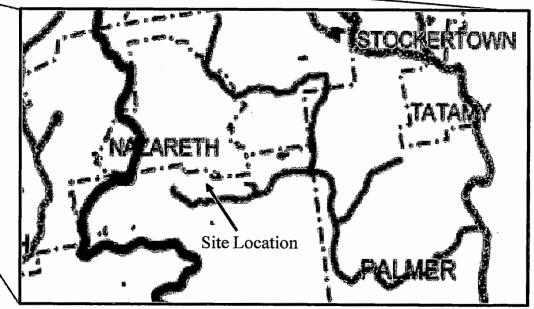


Figure 11: Act 149 Conservation Easements (outlined in green)

Adapted from the 2009 Northampton County Agricultural Conservation Easements Map, created by the Northampton County Farmland Preservation Board

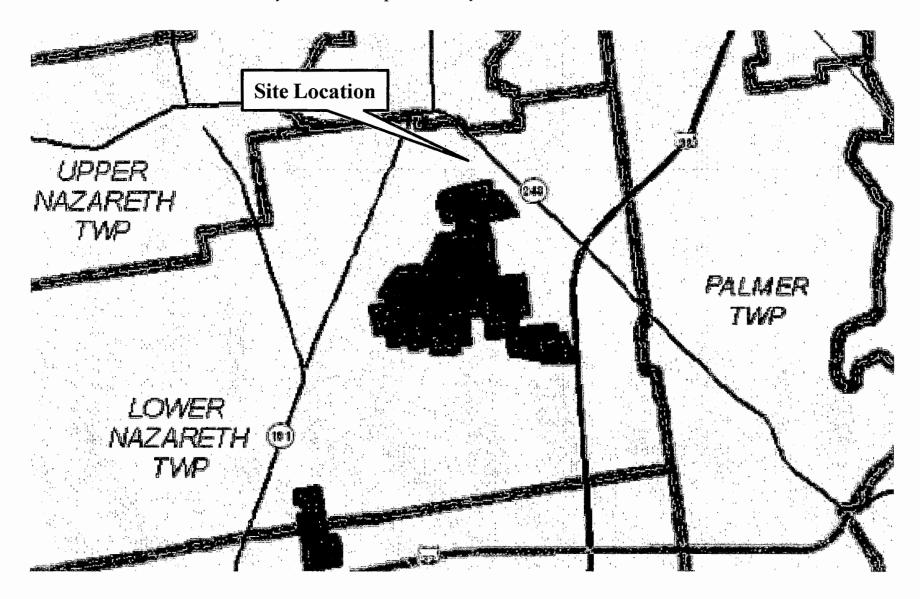
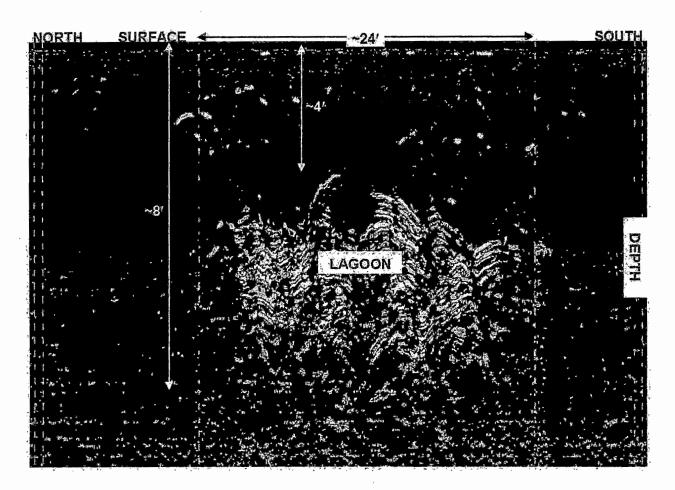
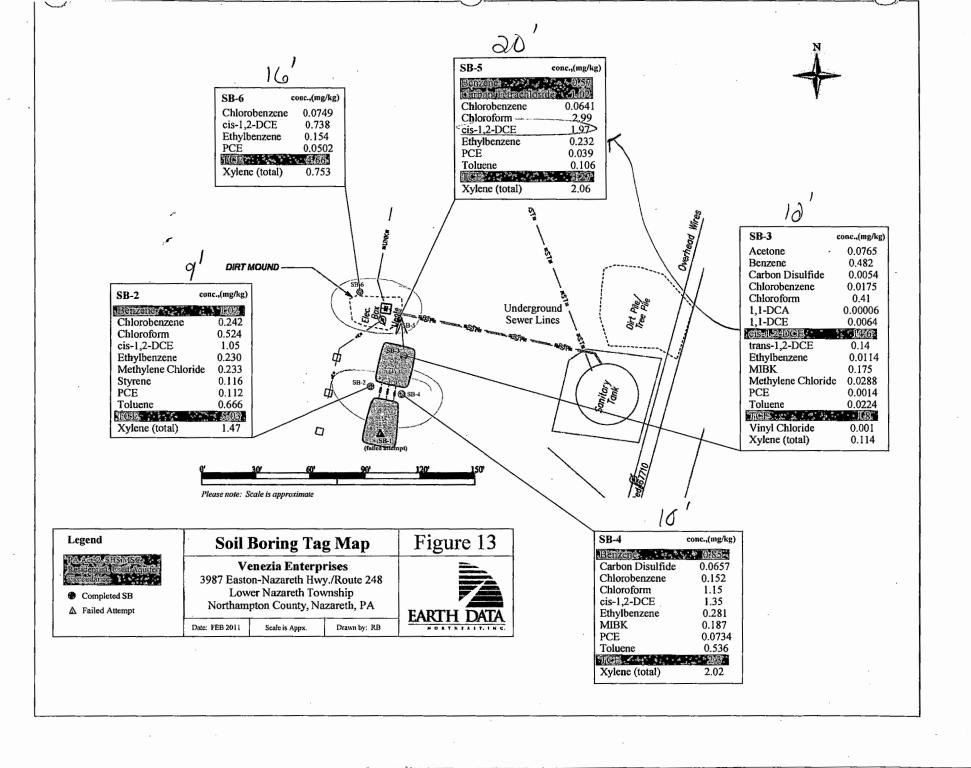


Figure 12: Geo-Graf GPR Data Profile, Cross-Section of Northern-most Lagoon



Representative GPR data profile excerpt extending from north to south over the center of the northern GPR-detected lagoon location (refer to the SAM). Shown in this profile are the anomalous GPR data signatures exhibited by the suspected former wastewater lagoon. Based on GPR data approximations, the lagoon appears from about 4' to 8' below grade. 400 MHz GPR antenna system, edited from 60 ns.



U.S. Fish and Wildlife Service **National Wetlands Inventory** · Y_XX Inaccurate Data Wetland in question . "油料 Venezia Site

Hollo

Figure 14: Wetlands Aerial

"Feb 25, 2011

Wetlands

Freshwater Emergent

Freshwater Forested/Shrub

Estuarine and Marine Deepwater

Estuarine and Marine

Freshwater Pond

Lake

Riverine

Other

Riparian

Herbaceous

Forested/Shrub

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

2000 ft

Table 1: Northampton County, Pennsylvania; Hydric Soils List, February 2011

recident seven seven	I the monitor of the second section of the second section of	eratud Satromerasa Sua			WILLIAM STATE OF THE STATE OF T	20-1-12-12-12-12			
Area Symbol	Area Name	Map Unit Sequence	Map Unit Symbol	Map Unit Name	Component Name and Phase	Comp	Landforms	Hydric Rating	Hydric Criteria
PA095	Northampton County, Pennsylvania	3	AnA	Andover-Buchanan gravelly loams, 0 to 3 percent slopes	Andover	55	Hillslopes	Yes	2B3
PA095	Northampton County, Pennsylvania	4	AnB	Andover-Buchanan gravelly loams, 3 to 8 percent slopes	Andover	55	Hillslopes	Yes	2B3
PA095	Northampton County, Pennsylvania	5	AoB	Andover-Buchanan gravelly loams, 0 to 8 percent slopes,	Andover, extremely stony	55	Hillslopes	Yes	2B3
PA095	Northampton County, Pennsylvania	20	BtA	Brinkerton-Comly silt loams, 0 to 3 percent slopes	Brinkerton	75	Hills	Yes	2B3
PA095	Northampton County, Pennsylvania	21	BtB	Brinkerton-Comly silt loams, 3 to 8 percent slopes	Brinkerton	75	Hills	Yes	2B3
PA095	Northampton County, Pennsylvania	26	Cd	Catden muck	Catden	95	Kettles	Yes	1, 3
PA095	Northampton County, Pennsylvania	27	ChA	Chippewa silt loam, 0 to 3 percent slopes	Chippewa	90	Depressions	Yes	2B3
PA095	Northampton County, Pennsylvania	28	ChB	Chippewa silt loam, 3 to 8 percent slopes	Chippewa	90	Depressions	Yes	2B3
PA095	Northampton County, Pennsylvania	29	CkB	Chippewa gravelly silt loam, 0 to 8 percent slopes, extremely	Chippewa, extremely stony	90	Depressions	Yes	2B3
PA095	Northampton County, Pennsylvania	32	CnB	Cokesbury silt loam, 3 to 8 percent slopes	Cokesbury	90	Depressions	Yes	2B3
PA095	Northampton County, Pennsylvania	33	СоВ	Cokesbury-Califon channery silt loams, 0 to 8 percent	Cokesbury, very stony	58	Depressions	Yes	2B3
PA095	Northampton County, Pennsylvania	47	Fl	Fluvaquents	Fluvaquents	85	Flood plains	Yes	2B3
PA095	Northampton County, Pennsylvania	55	Ha	Halsey silt loam	Halsey	90	Flood plains	Yes	2B3
PA095	Northampton County, Pennsylvania	60	Но	Holly silt loam	Holly	90	Flood plains	Yes	2B3, 4

Table 3: Soil Boring Sampling Results for VOA and Metals Analysis

	SB-2	SB-3	SB-4	SB-5	SB-6	2011 PA ACT-2
Parameter	Sample Depth: 9 ft	Sample Depth: 12 ft	Sample Depth: 10 ft	Sample Depth: 20 ft	Sample Depth: 16 ft	Residential, Used Aquifer
Acetone	ND	0.0765	ND	ND	ND	3,300
Benzene	1/028	0.482	0.85	FEG 0/5//45T	ND	0.5
Bromodichlormethane	ND	ND	ND	ND	ND	8
Bromoform	ND	ND	ND	ND	ND	8
Bromomethane	ND	ND	ND	ND	ND	1
2-Butanone (MEK)	ND	ND	ND	ND	ND	400
Carbon disulfide	ND	0.0054	0.0657	ND	ND	150
Carbon tetrachloride	ND ·	ND	ND	11.025	ND	0.5
Chlorobenzene	0.242	0.0175	0.152	0.0641	0.0749	10
Chloroethane	ND	ND	ND	ND	ND	23
Chloroform	0.524	0.41	1.15	2.99	ND	8
Chloromethane	ND	ND	ND	ND	ND	3
Dibromochloromethane	ND	ND	ND	ND	ND	8
1,1-Dichloroethane	ND	0.00006	ND	ND	ND	3.1
1,2-Dichloroethane	ND	ND	ND	ND	ND ·	0.5
1,1-Dichloroethene	ND	0.0064	ND	ND	ND	0.7
cis-1,2-Dichloroethene	1.05	146	1.35	1.97	0.738	7
trans-1,2-Dichloroethene	ND	0.14	ND	ND	ND	10
1,2-Dichloroethene (total)	1.05	14.7	1.35	1.97	0.738	NA
1,2-Dichloropropane	ND	ND	ND	ND	ND	0,5
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	0.66 (tetal)
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	0.66 (total)
Ethylbenzene	0.23	0.0114	0.281	0.232	0.154	70
2-Hexanone	ND	ND	ND	ND	ND	1.1
4-Methyl-2-Pentanone (MIBK)	ND	0.175	0.187	ND	ND	290
Methylene Chloride	0.233	0.0288	ND	ND	ND	0.5
Styrene	0.116	ND	ND	ND	ND	24
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	0.08
Tetrachloroethene	0.112	0.0014	0.0734	0.039	0.0502	0.5
Toluene	0.666	0.0224	0.536	0.106	ND	100
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	20
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	0.5
Trichloroethene	F 2/5/03 CAN	Man Stoll	Tre 23 6 75	S 276 2	4.66	0.5
Vinyl Chloride	ND	0.001	ND	ND	ND	0.2
Xylene (total)	1.47	0.114	2.02	2.06	0.753	1,000

	SB-2	SB-3	SB-4	SB-5	SB-6	2011 PA ACT-2.
Parameter	Sample Depth: 9 ft	Sample Depth:	Sample Depth: 10 ft	Sample Depth: 20 ft	Sample Depth: 16 ft	Non-Residential Used Aquifer
Aluminum	20,500	15,700	15,000	14,200	15,100	NA
Antimony	< 2.3	< 4.9	< 4.7	< 2.5	< 2.5	27
Arsenic	8.6	34.6	24.5	26.2	10.3	29
Barium	55.7	124	113	50.3	65.4	8,200
Beryllium	0.84	1.2	0.92	3.5	1.1	320
Cadmium	< 0.58	< 1.2	< 1.2	< 0.62	< 0.63	38
Calcium	1,210	< 610	3,590	< 620	781	NA
Chromium	16.7	16.8	21.7	14.9	9.2	190 (VI)
Cobalt	12.2	33.1	62.7	55.7	23,7	140
Copper	32.2	35.3	37	27.9	29.4	43,000
Iron	36,900	81,800	80,800	64,300	35,000	NA
Lead	18,8	17.9	16,5	17.6	14.5	450
Magnesium	1,040	< 610	584	< 620	644	NA
Manganese	336	1,990	2.870	604	814	2,000
Mercury	< 0.037	0.12	0.038	< 0.038	< 0.036	10
Nickel	24.3	37.8	53,6	103	34	650
Potassium	< 1,200	< 1,200	< 1,200	< 1,200	< 1,300	NA
Selenium	< 2.3	< 4.9	< 4.7	< 2.5	< 2.5	26
Silver	< 0.58	< 1.2	< 1.2	< 1.2	< 0.63	84
Sodium	< 1,200	< 1,200	< 1,200	< 1,200	< 1,300	NA
Thallium	< 1.2	< 2.4	< 2.3	< 2.5	< 1.3	14
Vanadium	20.9	17.2	13.1	16.5	11.5	72,000
Zinc	61.0	85.9	86.6	435	79	12,000

Note: A soil sample obtained from 2' bgs in SB-8 (installed near the SE corner of the former waste water holding tank) contained a Manganese exceedence as well {2,360 mg/kg}, but is not shown.

Legend
All values in mg/kg, TDS ≤2500
ND: Not Detected
NA: Not Applicable

Table 4: Hazardous Wastes Generated by CLTL, 1980

A CALL A Hazardous Waste Description (W.)	ON USEPAR
	Wate Code
1,1,1,2-Tetrachloroethane	U208
1,1,2-Trichloroethane	U227
1,1-Dichloroethylene	U078
1,1-Dimethyl Hydrazine	U098
1,2-Dichlorobenzene	U070
2,4- Dinitrophenol	U104
2,4-Dinitrotoluene	U105
2-Chlorophenol	U048
2-Sec-Butyl-4, 6-Dinitrophenol	P020
Acrylic Acid	U008
Allyl Alcohol	P005
Aniline	U012
Benzene	U019
Chlorobenzene	U037
Chloroethene	U043
Chloroform	U044
Chloromethane	U045
Cresols	U052
Cresote	U051
Cresylic Acid	U054
Cumene	U055
Cyclohexane	U056
Cyclohexanone	U057
Diethyl Phthalate	U088
Dimethyl Phthalate	U102
Dimethylamine	U092
Dimethylcarbamoyl Chloride	U097
	U069
Di-n-Butyl Phthalate	
Di-N-Octyl Phthalate	U107
Dipropylamine	U110
Ethyl Acetate	U112
Ethyl Acrylate	U113
Ethyl Ether	U117
Ethyl Methacrylate	U118
Ethylenediamine	P053
Formaldehyde	U122
Formic Acid	U123
Furfural	U125
Hydrazine	U133
Isobutyl Alcohol	U140
Maleic Anhydride	U147
Maleic Hydrazide	U148
Methanol	U154
Methyl Ethyl Ketone ("MEK")	U159
Methyl Isobutyl Ketone	U161
Methyl Methacrylate	U162
Naphthalene	U165
n-Butyl Alcohol	U031
Nitrobenzene	U169
N-Propylamine	U194
Paraldehyde	U182
p-Chloroanline	P024
Phenol	U188
Phthalic Anhydride	U190
Pyridine	U196
Tetrachloromethane	U211
Toluene	U220
Toluene Diisocyanate	U223
Toluenediamine	U221
Toxaphene	U224
Tribromomethane	U224 U225
Trichloroethene	U223
Urethane	U238
CIGHIELO	1 0230



Project:

CS0647

.

Boring ID:

SB-2

Boring Diameter:

2"

Date:

1/28/10

Sampling Method:

Macro-Core

Depth to Water:

N/A

Drill Rig:

54DT Geoprobe

Logged By:

Depth (ft)	% Recovery	Lithology	Color	Material Description	PID (ppm)	Sample ID
1			Black	Gravelly fill	0.0	
2					10.0	
3			D.Brown	Dense clay, dry, fine w/ fill, odor	70.0	
4	80		Black	Dense clay, fine, compact w/ some moisture, some gravel, odor	100.0	
5			D.Brown Black	Dense clay w/ gravelly fill, fine, compact w/ some moisture, some gravel, odor	150.0	
6			Diaok	mostare, some graver, each	60.0	
7				odor	100.0	
8	100			, odor	105.0	
9			Black to Brown	Dense clay w/ some gravelly fill, fine, compact w/ some moisture	180.0	SB-2
10			Brown	w/ some moisture	120.0	
11					100.0	
12	100			As Above (AA)	75.0	
13					170.0	
14			Brown	AA	120.0	
15				strong odor	170.0	
16	100				21.0	
17					40.0	
18					140.0	
19			Brown	AA	30.0	
20	100			strong odor	50.0	
21						
22						
23						
24						



Project:

CS0647

Boring ID:

SB-3

Boring Diameter:

2"

Date:

1/29/10

Sampling Method:

Macro-Core

Depth to Water:

1.7' bgs

Drill Rig:

54DT Geoprobe

Logged By:

				No. of the second second	DID ()	[0
Depth (ft)	% Recovery	Lithology	Color	Material Description	PID (ppm)	Sample ID
1					0.0	
2			D.Brown	Gravelly fill, coarse, w/ some moisture suspect perched water table	6.5	
3				suspect perened water table	12.0	
4	60		Gray	Clay w/ gravelly fill, v.moist	100.0	
5					130.0	PID may not be
6					50.0	accurate
7					20.0	
8	100				35.0	
9					45.5	
10			Gray to Brown		50.0	
11			D 10****	Gravelly clay, v.moist, compact	50.0	
12	100			Ceased SB-3 operations due to water	N/A	SB-3
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

EARTH DATA

Project:

CS0647

Boring ID:

SB-4

Boring Diameter:

2"

Date:

1/29/10

Sampling Method:

Macro-Core

Depth to Water:

N/A

Drill Rig:

54DT Geoprobe

Logged By:

Depth (ft)	% Recovery	Lithology	Color	Material Description	PID (ppm)	Sample ID
1				Gravelly fill	N/A	
2			D.Gray		N/A	
3			Brown	Dense clay, fine w/ some moisture, compact w/	25.0	
4	65		D.Brown	some gravel odor	68.0	
5					47.0	
6			D.Brown	Dense clay, fine w/ some moisture, compact w/	45.0	
7			Brown w/	some gravel, odor	124.0	
8	100		Black		76.0	
9			D.Brown w/		85.0	
10			Black	Dense clay, fine w/ some moisture, compact, odor	150.0	SB-4
11					121.0	
12	100		Brown	Dense clay w/ some sand, dry, coarse, w/ some gravel	116.0	
13				gars.	50.0	
14			Brown	Dense clay, compact w/ some gravel, some moisture	75.0	
15				,	150.0	
16	100				110.0	
17			Brown w/		100.0	
18			Gray	Dense clay, compact w/ some moisture, some gravel	110.0	
19					85.0	
20	100				29.0	
21				. ,		
22						
23						
24						



Project:

CS0647

Boring ID:

SB-5

Boring Diameter:

2"

Date:

1/29/10

Sampling Method:

Macro-Core

Depth to Water:

N/A

Drill Rig:

54DT Geoprobe

Logged By:

D.Gray Gravelly clay w/ fill N/A Compact	
N/A S D.Gray w/ Orange, Brown Some odor	
A	
Dense clay, compact, fine w/ some moisture, some gravel 32.0	
D.Gray w/ Orange, Brown Dense clay, compact, fine w/ some moisture, some gravel 32.0 32.0 38.5 9 Brown Dense clay w/ some moisture, some gravel 32.0 38.5 9 Brown Dense clay w/ some moisture, gravelly fill 47.0 Brown w/ Black, Moist clay, fine odor 11 D.Brown Silty clay, fine, moist w/ gravelly fill 80.0 D.Brown Silty clay, fine, moist w/ gravelly fill 80.0	
6	
7 8 100 33.5 38.5 9.5 10 Brown Dense clay w/ some moisture, gravelly fill 47.0 47.0 11 Brown w/ Black, Maroon Maroon 115.0 45.0 14 D.Brown Silty clay, fine, moist w/ gravelly fill 80.0 60.0	
Some odor 9.5 9.5	
9 Brown Dense clay w/ some moisture, gravelly fill 47.0 68.0	,
11	
12 100 Black, Moist clay, fine odor 115.0 13	
12 100 Maroon odor 115.0 13 45.0 14 D.Brown Silty clay, fine, moist w/ gravelly fill 80.0 15 60.0	
D.Brown Silty clay, fine, moist w/ gravelly filt 80.0	
15 60.0	
16 100 odor 100.0	
17 D.Brown	
Dense clay w/ some gravelly fill, some moisture, 105.0 v.compact	
19 85.0	
20 100 Brown 130.0 S	B-5
21	
22	
, 23	
24	

EARTH DATA

Project:

Boring Diameter:

CS0647

2"

...

Sampling Method: Drill Rig: Macro-Core

54DT Geoprobe

Boring ID:

SB-6

Date:

1/29/10

Depth to Water:

N/A

Logged By:

Depth (ft)	% Recovery	Lithology	Color	Material Description	PID (ppm)	Sample ID
1			D.Brown	Dense clay w/ gravelly fill, moist, fine, compact	N/A	
2					N/A	
3					N/A	
4	85		Brown	Dense clay, moist, fine, compact	N/A	
5			Black	Moist clay w/ gravelly fill	N/A	
6					N/A	
7					N/A	
8	100		Brown	Moist clay, fine	N/A	
9			Brown		N/A	
10			DIOWII	Moist clay, compact, some coarse	N/A	
11					N/A	
12	100		Black	Dense clay, moist, fine w/ odor	83.0	
13			Black	Dense clay w/ gravelly fill, moist w/ some odor	55.0	İ
14			Bidde	Belise day in gravely lik, most in some edol	90.0	
15					120.0	
16	100		Brown	Dense clay, moist, fine w/ some odor	130.0	SB-6
17			Black	Dense clay, moist, fine	55.0	
18	95		Brown w/	REFUSAL @ 18.1' Silty clay	31.0 55.0	
19			Red	,	33.5	
20						
21						
22						
23						
24						









08/17/10



Technical Report for

Earth Data Northeast

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

CS0647

Accutest Job Number: JA38847

Sampling Dates: 01/28/10 - 01/29/10

Report to:

Earth Data Northeast

rbeebe@earthdatane.com

ATTN: Ryan Beebe

Total number of pages in report: 57



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Tony Esposito 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

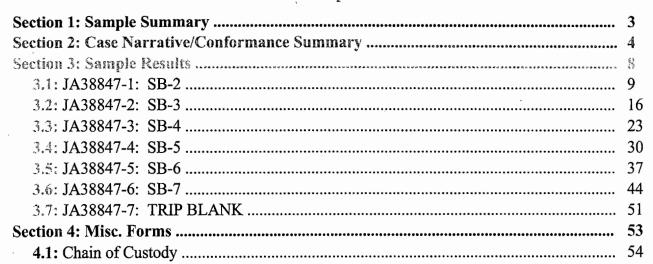
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.



Table of Contents

Sections:













Sample Summary

Earth Data Northeast

Job No:

JA38847

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA Project No: CS0647

Sample Number	Collected Date Ti	ime By	Received	Matri Code		Client Sample ID
JA38847-1	01/28/10 15	5:00 RB	01/29/10	SO	Soil	SB-2
JA38847-2	01/29/10 09):10 RB	01/29/10	so	Soil	SB-3
JA38847-3	01/29/10 11	:17 RB	01/29/10	so	Soil	SB-4
JA38847-4	01/29/10 13	3:05 RB	01/29/10	so	Soil	SB-5
JA38847-5	01/29/10 14	1:52 RB	01/29/10	so	Soil	SB-6
JA38847-6	01/29/10 16	6:20 RB	01/29/10	so	Soil	SB-7
JA38847-7	01/29/10 16	6:20 RB	01/29/10	AQ	Trip Blank Soil	TRIP BLANK





CASE NARRATIVE / CONFORMANCE SUMMARY

Client:

Earth Data Northeast

Job No

JA38847

Site:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Report Date

3/1/2010 4:34:35 PM

On 01/29/2010, 6 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.3 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA38847 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V1A3659

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA38112-1MS, JA38112-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: V1C3239

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA38847-4MS, JA38847-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JA38847-4: Dilution required due to matrix interference.

Matrix: SO

Batch ID: VD6652

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA39116-1MS, JA39116-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JA38847-1: Dilution required due to matrix interference.
- JA38847-3: Dilution required due to matrix interference.
- JA38847-5: Dilution required due to matrix interference.

Matrix: SO

Batch ID: VD6654

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38847-6MS, JA38847-6MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Bromodichloromethane, Dibromochloromethane are outside control limits.
- JA38847-6: Diluted due to high concentration of non-target compound.
- VD6654-BS for Bromodichloromethane: High percent recoveries and no associated positive found in the QC batch.
- ²² VD6654-BS for Dibromochloromethane: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO

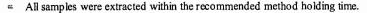
Batch ID: VV4163

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38737-18MS were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C

Matrix: SO

Batch ID: OP42138



- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38847-1MS, JA38847-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2-Nitrophenol, 4-Chloroaniline, 4-Nitrophenol are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for 2-Nitrophenol, 4-Chloroaniline are outside control limits. Probable cause due to matrix interference.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for bis(2-Ethylhexyl)phthalate, 2-Methylnaphthalene, Naphthalene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for 2,4,5-Trichlorophenol, 4-Nitrophenol, N-Nitrosodiphenylamine are outside control limits for sample OP42138-MSD. Probable cause due to sample homogeneity.
- Sample(s) OP42213-MS, OP42213-MSD have surrogates outside control limits. Probable cause due to matrix interference.
- OP42138-MSD for N-Nitrosodiphenylamine: Outside control limits due to matrix interference.
- OP42138-MS for 4-Nitrophenol: Outside control limits due to matrix interference.
- OP42138-MSD for 2,4,5-Trichlorophenol: Outside control limits due to matrix interference.
- OP42138-MS for 2-Nitrophenol: Outside control limits due to matrix interference.
- OP42138-MS for 4-Chloroaniline: Outside control limits due to matrix interference.
- OP42138-MSD for 4-Nitrophenol: Outside control limits due to matrix interference.

Matrix: SO

Batch ID: OP42213

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA39305-9MS, JA39305-9MSD were used as the QC samples indicated.
- Sample(s) OP42213-MS, OP42213-MSD have surrogates outside control limits. Probable cause due to matrix interference.
- OP42213-MSD for 2,4,6-Tribromophenol: Confirmed by MS/MSD.
- OP42213-MS for 2,4,6-Tribromophenol: Confirmed by MS/MSD.
- OP42213-MS for 2-Fluorobiphenyl: Confirmed by MS/MSD.

Extractables by GC By Method SW846 8082

Matrix: SO

Batch ID: OP42148

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38847-1MS, JA38847-1MSD, OP42148-MSMSD were used as the QC samples indicated.
- JA38847-3 for Aroclor 1254: Reported from 2nd signal. %D of end check (ECC) on 1st signal excess method criteria (15 %) so using for confirmation only.



60000

Metals By Method SW846 6010B

Matrix: SO

Batch ID: MP51525

120

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38992-1MS, JA38992-1MSD, JA38992-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Recovery(s) for Calcium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic, Beryllium, Chromium, Copper, Lead, Sodium are outside control limits for sample MP51525-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>
- 33 JA38847-3 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Lead: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Chromium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Cadmium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Vanadium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-4 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JA38847-4 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Vanadium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- ¹² JA38847-3 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Cadmium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Chromium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Lead: Elevated detection limit due to dilution required for high interfering element.
- JA38847-2 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JA38847-3 for Copper: Elevated detection limit due to dilution required for high interfering element.
- Matrix Spike Duplicate Recovery(s) for Calcium and Iron is outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Metals By Method SW846 7471A

Matrix: SO

Batch ID: MP51546



- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA38862-5MS, JA38862-5MSD were used as the QC samples for metals.
- RPD(s) for MSD for Mercury are outside control limits for sample MP51546-S2. High rpd due to possible sample nonhomogeneity.

Wet Chemistry By Method SM18 2540G

Matrix: SO

Batch ID: GN34517

The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover











Section 3



Sample Results

Report of Analysis

Client Sample ID: SB-2 Lab Sample ID:

JA38847-1

Date Sampled: 01/28/10

Matrix:

SO - Soil

Date Received:

01/29/10

Method:

SW846 8260B

Percent Solids: 83.2

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Run #1 a

File ID

Analyzed 02/10/10

By

Prep Date

Prep Batch

Analytical Batch

Run #2

D165152.D

DF 1

TDN

n/a

n/a

VD6652

Initial Weight

5.6 g

Final Volume $10.0 \, ml$

Methanol Aliquot 100 ul

Run #1 Run #2

VOA TCL List

•	 -	~-	

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1200	260	ug/kg	
71-43-2	Benzene	1020	120	40	ug/kg	
75-27-4	Bromodichloromethane	ND	590	30	ug/kg	
75-25-2	Bromoform	ND	590	18	ug/kg	
74-83-9	Bromomethane	ND	590	47	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1200	230	ug/kg	
75-15-0	Carbon disulfide	ND	590	36	ug/kg	
56-23-5	Carbon tetrachloride	ND	590	65	ug/kg	
108-90-7	Chlorobenzene	242	590	40	ug/kg	J
75-00-3	Chloroethane	$ND_{\widetilde{M}}$	590	120	ug/kg	
67-66-3	Chloroform	524	590	37	ug/kg	J
74-87-3	Chloromethane	ND	590	19	ug/kg	
124-48-1	Dibromochloromethane	ND	590	13	ug/kg	
75-34-3	1,1-Dichloroethane	ND	590	16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	41	ug/kg	
75-35-4	1,1-Dichloroethene	ND	590	78	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1050	590	28	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	590	53	ug/kg	
540-59-0	1,2-Dichloroethene (total)	1050	590	28	ug/kg	
78-87-5	1,2-Dichloropropane	ND /	590	15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND j	590	16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	590	11	ug/kg	
100-41-4	Ethylbenzene	230	120	44	ug/kg	
591-78-6	2-Hexanone	ND	590	110	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND 🔪	590	95	ug/kg	
75-09-2	Methylene chloride	233	590	26	ug/kg	J
100-42-5	Styrene	116	590	13	ug/kg	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	590	34	ug/kg	
127-18-4	Tetrachloroethene	112	590	17	ug/kg	J
108-88-3	Toluene	666	120	34	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	590	15	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	590	22	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

Page 2 of 2

Client Sample ID: SB-2

Lab Sample ID: Matrix:

JA38847-1 SO - Soil

Date Sampled: 01/28/10 Date Received:

01/29/10

Percent Solids: 83.2

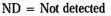
Method: SW846 8260B Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

VOA TCL List

CAS No.	Compound R	Lesult	RL	MDL	Units	Q	
79-01-6	Trichloroethene	030	590	62	ug/kg	[
75-01-4		ĬD	590	21	ug/kg		
1330-20-7		470	230	55	ug/kg		
CAS No.	Surrogate Recoveries R	Kun# 1	Run# 2	Lim	its		
1868-53-7	Dibromofluoromethane 9	0%		67-3	127%		
17060-07-0	1,2-Dichloroethane-D4	05%		65 -1	132%		
2037-26-5	Toluene-D8 9	0%		74-1	129%		
460-00-4	4-Bromofluorobenzene 9	6 %		62-	138%		
CAS No.	Tentatively Identified Compour	ıds	R.T.	Est.	Conc.	Units	Q
	alkane		16.99	240	00	ug/kg	J
	Naphthalene, decahydro-		17.10	200	00	ug/kg	
	C4 alkyl benzene		17.36	180	00	ug/kg	J
	C4 alkyl benzene		17.79	340	00	ug/kg	J
	C4 alkyl benzene		17.86	200	00	ug/kg	J
	Naphthalene decahydro-methyl		18.02	220		ug/kg	
	alkane		18.17	290	00	ug/kg	J
	C4 alkyl benzene		18.35	420	00	ug/kg	J
	unknown	` .	18.41	210	00		J
	dihydro-dimethylindene + C5 all	kylbenzene		320		ug/kg	J
	C5 alkyl benzene		18.87	230		~ ~	
91-20-3	Naphthalene		19.16	190		ug/kg	JN
	unknown		19.25	190		ug/kg	
	unknown		19.35	300		ug/kg	Ĵ
	Naphthalene, methyl-		20.50	190		ug/kg	Ĵ
	Total TIC, Volatile			372	000	ug/kg	J

(a) Dilution required due to matrix interference.



MDL - Method Detection Limit



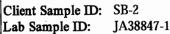
RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Matrix:

SO - Soil

Date Sampled: Date Received:

01/28/10

01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: av (Route 248). Nazareth.

Project:	Venezia, 398	7 Eastor	ı Nazaret	h Highway	(Route 248)	, Nazareth, PA

Run #1 Run #2	File ID F86693.D F86739.D	DF 1 10	02/10/10 02/11/10	OYA LP	02/06/10 02/06/10	OP42138 OP42138	EF4091 EF4093

	Initial Weight	Final Volume	,	
Run #1	35.1 g	1.0 ml		
Run #2	35.1 g	1.0 ml		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	55	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	58	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	680	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	680	42	ug/kg	
95-48-7	2-Methylphenol	ND	68	39	ug/kg	
	3&4-Methylphenol	ND	68	43	ug/kg	
88-75-5	2-Nitrophenol	ND	170	36	ug/kg	
100-02-7	4-Nitrophenol	ND	340	58	ug/kg	
87-86-5	Pentachlorophenol	ND	340	59	ug/kg	
108-95-2	Phenol	ND	68	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg	
83-32-9	Acenaphthene	ND	34	9.9	ug/kg	
208-96-8	Acenaphthylene	ND	34	11	ug/kg	
120-12-7	Anthracene	85.8	34	12	ug/kg	
56-55-3	Benzo(a)anthracene	51.3	34	11	ug/kg	
50-32-8	Benzo(a)pyrene	31.1	34	10	ug/kg	J
205-99-2	Benzo(b)fluoranthene	47.2	34	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	29.1	34	13	ug/kg	J
207-08-9	Benzo(k)fluoranthene	37.9	34	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	68	12	ug/kg	
85-68-7	Butyl benzyl phthalate	53.2	68	20	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	68	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	40.6	68	16	ug/kg	J
218-01-9	Chrysene	67.7	34	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND .	68	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	68	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	68	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	68	10	ug/kg	

ND = Not detected



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

 $N \, = \, Indicates \, \, presumptive \, evidence \, \, of \, a \, \, compound \, \,$

Client Sample ID: Lab Sample ID:

SB-2

JA38847-1

Date Sampled: 01/28/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: 83.2

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	72.0	68	9.9	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	68	9.2	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	68	7.6	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	68	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	68	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	12	ug/kg	
132-64-9	Dibenzofuran	365	68	10	ug/kg	
84-74-2	Di-n-butyl phthalate	94.9	68	7.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	68	17	ug/kg	
84-66-2	Diethyl phthalate	ND	68	12	ug/kg	
131-11-3	Dimethyl phthalate	ND ·	68	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	4830 a	680	300	ug/kg	
206-44-0	Fluoranthene	260	34	15	ug/kg	
86-73-7	Fluorene	571	34	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	68	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	9.5	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	680	35	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	24.1	34	12	ug/kg	J
78-59-1	Isophorone	ND	68	9.2	ug/kg	
91-57-6	2-Methylnaphthalene	25800 a	680	190	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	7480 a	340	93	ug/kg	
98-95-3	Nitrobenzene	ND	68	9.9	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	68	8.4	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	695	34	16	ug/kg	
129-00-0	Pyrene	195	34	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	68	9.1	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
367-12-4	2-Fluorophenol	58%	65%	30-1	09%	
4165-62-2	Phenol-d5	58%	69%	28-1	08%	
118-79-6	2,4,6-Tribromophenol	69%	80%	28-1	25%	
4165-60-0	Nitrobenzene-d5	94%	108%	28-1	13%	
321-60-8	2-Fluorobiphenyl	74%	97%	38-1	07%	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Page 3 of 3

Client Sample ID: SB-2 JA38847-1 Lab Sample ID:

Matrix:

SO - Soil

Date Sampled: 01/28/10 Date Received: 01/29/10

Method: Project:

SW846 8270C SW846 3550B

Percent Solids: 83.2

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1718-51-0	Terphenyl-d14	76%	102%	31-116%	
CAS No.	Tentatively Identified Compo	ounds	R.T.	Est. Conc.	Units Q
	alkane alkane		3.67 3.89	4200 1600	ug/kg J ug/kg J
	C4 alkyl benzene		4.27 4.37	4200	ug/kg J
	alkane C4 alkyl benzene		4.48	1900 2400	ug/kg J ug/kg J
	alkane alkane		4.72 5.76	1800 3500	ug/kg J ug/kg J
	unknown cycloalkane/alkene		6.44 7.09	3000 2800	ug/kg J ug/kg J
	alkane		7.24	1600	ug/kg J
•	alkane alkane		7.37 7.62	3300 11000	ug/kg J ug/kg J
	Naphthalene dimethyl Naphthalene dimethyl		7.70 7.86	4500 7100	ug/kg J ug/kg J
	Naphthalene dimethyl alkane		7.99 8.11	2800 3700	ug/kg J
	alkane		8.44	6400	ug/kg J ug/kg J
	Phenol, -(-tetramethylbuty alkane		9.31 9.97	2500 2000	ug/kg J ug/kg J
	alkane Phenol, -(-tetramethylbuty		10.01 10.08	2000 2000	ug/kg J
	Phenol, nonyl-		10.14	2600	ug/kg J ug/kg J
	Phenol, nonyl- unknown		10.18 10.34	1800 1900	ug/kg J ug/kg J
	Phenol, nonyl- Total TIC, Semi-Volatile		10.40	1800 82400	ug/kg J ug/kg J

(a) Result is from Run# 2



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-2

Lab Sample ID: JA38847-1

Matrix:

SO - Soil

Date Sampled: 01/28/10

Date Received: 01/29/10

Method: Project:

SW846 8082 SW846 3545

Percent Solids: 83.2

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

35

35

8.9

ug/kg

Run #1

File ID DF OA60058.D 1

Analyzed 02/09/10

Prep Date TDR 02/08/10

Prep Batch OP42148

Analytical Batch GOA2167

Run #2

Initial Weight

Final Volume

Run #1 17.1 g

11097-69-1 Aroclor 1254

10.0 ml

Run #2

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	13	ug/kg	
11104-28-2	Aroclor 1221	ND	35	23	ug/kg	
11141-16-5	Aroclor 1232	ND	35	11	ug/kg	
53469-21-9	Aroclor 1242	ND	35	13	ug/kg	
12672-29-6	Aroclor 1248	ND	35	7.0	ug/kg	

ND

ND

11096-82-5	Aroclor 1260	ND	35	14 ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		33-141%
877-09-8	Tetrachloro-m-xylene	74%		33-141%
2051-24-3	Decachlorobiphenyl	88%		32-154%
2051-24-3	Decachlorobiphenyl	70 %		32-154%



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-2

Lab Sample ID: JA38847-1

Matrix: SO - Soil

Date Sampled: 01/28/10 Date Received: 01/29/10

Percent Solids: 83.2

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	20500	23	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Antimony	< 2.3	2.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Arsenic	8.6	2.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Barium	55.7	23	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Beryllium	0.84	0.23	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.58	0.58	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Calcium	1210	580	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Chromium	16.7	1.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Cobalt	12.2	5.8	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Copper	32.2	2.9	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Iron	36900	12	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Lead	18.8	2.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Magnesium	1040	580	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Manganese	336	1.8	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Mercury	< 0.037	0.037	mg/kg	1	02/12/10	02/12/10 JW	SW846 7471A ²	SW846 7471A ⁴
Nickel	24.3	4.7	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Selenium	< 2.3	2.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Silver	< 0.58	0.58	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B 1	SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Vanadium	20.9	5.8	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Zinc	61.0	2.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³

(1) Instrument QC Batch: MA23847(2) Instrument QC Batch: MA23849(3) Prep QC Batch: MP51525(4) Prep QC Batch: MP51546



Page 1 of 2

Client Sample ID: SB-3 Lab Sample ID: JA38847-2 Matrix: SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10 Percent Solids: 81.2

Method: Project: SW846 8260B Percent Solids: 81.2 Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	V99747.D	1	02/10/10	JLI	n/a	n/a	VV4163
Run #2	D165202.D	1	02/11/10	TDN	n/a	n/a	VD6654

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.9 g		
Run #2	5.7 g	10.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	76.5	10	2.3	ug/kg	
71-43-2	Benzene	482 a	120	41	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.27	ug/kg	
75-25-2	Bromoform	ND	5.2	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.1	ug/kg	
75-15-0	Carbon disulfide	5.4	5.2	0.32	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.58	ug/kg	
108-90-7	Chlorobenzene	17.5	5.2	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.2	1.0	ug/kg	
67-66-3	Chloroform	410 a	600	38	ug/kg	J
74-87-3	Chloromethane	ND	5.2	0.17	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.11	ug/kg	
75-34-3	1,1-Dichloroethane	0.60	5.2	0.14	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.36	ug/kg	
75-35-4	1,1-Dichloroethene	6.4	5.2	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	14600 a	600	29	ug/kg	
156-60-5	trans-1,2-Dichloroethene	140	5.2	0.47	ug/kg	
540-59-0	1,2-Dichloroethene (total)	14700 a	600	29	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.14	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.14	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.10	ug/kg	
100-41-4	Ethylbenzene	11.4	1.0	0.39	ug/kg	
591-78-6	2-Hexanone	ND	5.2	1.0	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	175 a	600	97	ug/kg	J
75-09-2	Methylene chloride	28.8	5.2	0.23	ug/kg	
100-42-5	Styrene	ND	5.2	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.31	ug/kg	
127-18-4	Tetrachloroethene	1.4	5.2	0.15	ug/kg	J
108-88-3	Toluene	22.4	1.0	0.30	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.13	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.19	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 2 of 2

 Client Sample ID:
 SB-3

 Lab Sample ID:
 JA38847-2
 Date Sampled:
 01/29/10

 Matrix:
 SO - Soil
 Date Received:
 01/29/10

 Method:
 SW846 8260B
 Percent Solids:
 81.2

 Project:
 Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA



VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q	
79-01-6	Trichloroethene	1800 a	600	63	ug/kg	[
75-01-4	Vinyl chloride	1.0	5.2	0.19	ug/kg	J	
1330-20-7	Xylene (total)	114	2.1	0.49	ug/kg		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its		
1868-53-7	Dibromofluoromethane	102%	90%	67-1	27%		
17060-07-0	1,2-Dichloroethane-D4	112%	105 %	65-1	32%		
2037-26-5	Toluene-D8	102%	88%	74-1	29%		
460-00-4	4-Bromofluorobenzene	83%	94%	62-1	38%		
CAS No.	Tentatively Identified Compo	ounds	R.T.	Est.	Conc.	Units	Q
75-43-4	Methane, dichlorofluoro-		5.88	29		ug/kg	JN
	C3 alkyl benzene		15.66	14		ug/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-		15.75	13		ug/kg	JN
95-63-6	Benzene, 1,2,4-trimethyl-		16.19	39		ug/kg	JN
	C4 alkyl benzene		16.94	15		ug/kg	J
95-50-1	Benzene, 1,2-dichloro-		17.14	40		uġ/kg	
	C4 alkyl benzene		17.82	7.9		ug/kg	
	C4 alkyl benzene		17.88	21		ug/kg	
	C4 alkyl benzene		18.38	19		ug/kg	
	1H-indene-dihydro-methyl		18.43	11		ug/kg	
	Naphthalene, tetrahydro-		18.66	12		ug/kg	
	C5 alkyl benzene		18.78	11		ug/kg	
91-20-3	Naphthalene		19.26	120		ug/kg	
	Naphthalene methyl		20.66	70		ug/kg	Ĵ
	Naphthalene methyl		20.94	32		ug/kg	ĵ
	Total TIC, Volatile			453.	9	ug/kg	J

(a) Result is from Run# 2

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 3

Client Sample ID: SB-3 Lab Sample ID: JA38847-2

Matrix: SO - Soil

SW846 8270C SW846 3550B

Date Sampled: 01/29/10
Date Received: 01/29/10

Percent Solids: 81.2

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Analytical Batch File ID DF Analyzed By Prep Date Prep Batch EM2690 Run #1 M71167.D 1 02/12/10 LP 02/12/10 OP42213 Run #2

Initial Weight Final Volume Run #1 35.2 g 1.0 ml Run #2

ABN TCL List

Method:

Project:

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	56	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	700	43	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	700	43	ug/kg	
95-48-7	2-Methylphenol	ND	70	40	ug/kg	
	3&4-Methylphenol	ND	70	44	ug/kg	
88-75-5	2-Nitrophenol	ND	170	37	ug/kg	
100-02-7	4-Nitrophenol	ND	350	59	ug/kg	
87-86-5	Pentachlorophenol	ND	350	60	ug/kg	
108-95-2	Phenol	ND	70	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	41	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
83-32-9	Acenaphthene	ND	35	10	ug/kg	
208-96-8	Acenaphthylene	ND	35	11	ug/kg	
120-12-7	Anthracene	ND	35	12	ug/kg	
56-55-3	Benzo(a)anthracene	ND	35	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	70	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	70	20	ug/kg	
91-58-7	2-Chloronaphthalene	ND	70	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	70	16	ug/kg	
218-01-9	Chrysene	ND	35	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	70	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	70	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	70	10	uġ/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	70	11	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Ñ

Client Sample ID: Lab Sample ID:

SB-3 JA38847-2

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Matrix: Method:

SW846 8270C SW846 3550B

Percent Solids: 81.2

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	70	10	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	70	9.4	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	70	7.8	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	70	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	70	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	12	ug/kg	
132-64-9	Dibenzofuran	ND	70	10	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	70	7.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	70	17	ug/kg	
84-66-2	Diethyl phthalate	ND	70	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	70	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	70	31	ug/kg	
206-44-0	Fluoranthene	ND	35	15	ug/kg	
86-73-7	Fluorene	ND	35	-11	ug/kg	
118-74-1	Hexachlorobenzene	ND	70	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.7	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	700	36	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.7	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	12	ug/kg	
78-59-1	Isophorone	ND	70	9.4	ug/kg	
91-57-6	2-Methylnaphthalene	46.3	70	20	ug/kg	J
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	•
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	14	ug/kg	
91-20-3	Naphthalene	43.0	35	9.6	ug/kg	
98-95-3	Nitrobenzene	ND	70	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	70	8.5	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	21	ug/kg	
85-01-8	Phenanthrene	ND	35	16	ug/kg	
129-00-0	Pyrene	ND	35	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	70	9.3	ug/kg	
					0 0	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
367-12-4	2-Fluorophenol	78%		30-1	09%	
4165-62-2	Phenol-d5	81%		28-1	08%	
118-79-6	2,4,6-Tribromophenol	108%		28-1	25%	
4165-60-0	Nitrobenzene-d5	91%		28-1		
321-60-8	2-Fluorobiphenyl	97%		38-1	07%	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 3 of 3



Client Sample ID: SB-3 Lab Sample ID:

JA38847-2

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method: Project:

SW846 8270C SW846 3550B Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Percent Solids: 81.2

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits			
1718-51-0	Terphenyl-d14	102%		31-116%			
CAS No.	Tentatively Identified Con	pounds	R.T.	Est. Conc.	Units Q		
	system artifact		2.20	2200	ug/kg J		
	system artifact		2.25	200	ug/kg J		
	system artifact		3.25	320	-		
	system artifact/aldol-conden	sation	3.35	250	0 0		
	system artifact		3.48	550	~ ~		
	unknown	,	12.18	300			
	system artifact		18.44	190	~ ~		
	system artifact		18.98	250	ug/kg J		
	system artifact		19.50	320	ug/kg J		
	system artifact		19.99	190	ug/kg J		
	Total TIC. Semi-Volatile			300	ug/kg J		



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 1 of 1

Client Sample ID: SB-3 Lab Sample ID:

Matrix:

JA38847-2 SO - Soil

Date Sampled: 01/29/10

Date Received: 01/29/10

Method:

SW846 8082 SW846 3545

Percent Solids: 81.2

Project:

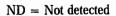
Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Run #1	File ID OA60033.D	DF 1	Analyzed 02/08/10	By TDR	Prep Date 02/08/10	Prep Batch OP42148	Analytical Batch GOA2166
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	13	ug/kg	
11104-28-2	Aroclor 1221	ND	36	24	ug/kg	
11141-16-5	Aroclor 1232	ND	36	12	ug/kg	
53469-21-9	Aroclor 1242	ND	36	13	ug/kg	
12672-29-6	Aroclor 1248	ND	36	7.2	ug/kg	
11097-69-1	Aroclor 1254	ND	36	9.1	ug/kg	
11096-82-5	Aroclor 1260	ND	36	14	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
877-09-8	Tetrachloro-m-xylene	87%		33-1	41%	
877-09-8	Tetrachloro-m-xylene	85%		33-1	41%	
2051-24-3	Decachlorobiphenyl	103%		32-1	54%	
2051-24-3	Decachlorobiphenyl	102%		32-1	54%	



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-3 Lab Sample ID: JA38847-2 Matrix: SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 81.2

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	15700	24	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Antimony a	< 4.9	4.9	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B 4
Arsenic a	34.6	4.9	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B 4
Barium	124	24	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B 4
Beryllium	1.2	0.24	mg/kg	1	02/09/10	02/10/10 ND		SW846 3050B ⁴
Cadmium a	< 1.2	1.2	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Calcium	< 610	610	mg/kg	1	02/09/10	02/10/10 ND		SW846 3050B 4
Chromium a	16.8	2.4	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Cobalt	33.1	6.1	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Copper a	35.3	6.1	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B 4
Iron	81800	24	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Lead a	17.9	4.9	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Magnesium	< 610	610	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Manganese a	1990	3.7	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Mercury	0.12	0.037	mg/kg	1	02/12/10	02/12/10 JW	SW846 7471A ²	SW846 7471A ⁵
Nickel	37.8	4.9	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Potassium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Selenium a	< 4.9	4.9	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Silver a	< 1.2	1.2	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Thallium ^a	< 2.4	2.4	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Vanadium a	17.2	12	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B 4
Zinc	85.9	2.4	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B 4

Instrument QC Batch: MA23847
 Instrument QC Batch: MA23849
 Instrument QC Batch: MA23851
 Prep QC Batch: MP51525
 Prep QC Batch: MP51546

(a) Elevated detection limit due to dilution required for high interfering element.

Page 1 of 2

SB-4 Client Sample ID: Lab Sample ID: Matrix:

JA38847-3 SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Method:

Percent Solids: 82.4 SW846 8260B

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

By TDN

Run #1 a Run #2

Final Volume

Prep Date n/a

Prep Batch n/a

Analytical Batch

VD6652

Initial Weight 4.6 g

File ID

D165153.D

10.0 ml

DF

1

Methanol Aliquot 100 ຟ

Analyzed

02/10/10

Run #1 Run #2

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1400	320	ug/kg	
71-43-2	Benzene	850	140	49	ug/kg	
75-27-4	Bromodichloromethane	ND	710	37	ug/kg	
75-25-2	Bromoform	ND	710	22	ug/kg	
74-83-9	Bromomethane	ND	710	58	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1400	280	ug/kg	
75-15-0	Carbon disulfide	65.7	710	43	ug/kg	J
56-23-5	Carbon tetrachloride	ND	710	79	ug/kg	
108-90-7	Chlorobenzene	152	710	48	ug/kg	J
75-00-3	Chloroethane	ND	710	140	ug/kg	
67-66-3	Chloroform	1150	710	45	ug/kg	
74-87-3	Chloromethane	ND	710	24	ug/kg	
124-48-1	Dibromochloromethane	ND	710	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	710	20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	710	94	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1350	710	34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	710	64	ug/kg	
540-59-0	1,2-Dichloroethene (total)	1350	710	34	ug/kg	
78-87-5	1,2-Dichloropropane	ND	710	19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	710	19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	710	14	ug/kg	
100-41-4	Ethylbenzene	281	140	53	ug/kg	
591-78-6	2-Hexanone	ND	710	140	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	187	710	120	ug/kg	J
75-09-2	Methylene chloride	ND	710	32	ug/kg	
100-42-5	Styrene	ND	710	15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND .	710	42	ug/kg	
127-18-4	Tetrachloroethene	73.4	710	21	ug/kg	J
108-88-3	Toluene	536	140	42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	710	18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	710	26	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

23 AF 57

Page 2 of 2

Client Sample ID: Lab Sample ID:

SB-4 JA38847-3

Date Sampled: 01/29/10

Matrix:

SO - Soil SW846 8260B Date Received: 01/29/10

Percent Solids: 82.4

Method: Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q	
79-01-6	Trichloroethene	2300	710	7 5	ug/kg		
75-01-4	Vinyl chloride	ND	710	25	ug/kg		
1330-20-7	Xylene (total)	2020	290	67	ug/kg		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts		
1868-53-7	Dibromofluoromethane	91%		67-12	27%		
17060-07-0	1,2-Dichloroethane-D4	107%		65-13	32%		
2037-26-5	Toluene-D8	90%		74-12			
460-00-4	4-Bromofluorobenzene	100%		62-13	38%		
CAS No.	Tentatively Identified Compo	unds	R.T.	Est.	Conc.	Units	Q
	alkane		15.69	3700	-	ug/kg	
	alkane		17.00	8600		ug/kg	
	Naphthalene, decahydro		17.10	3400	-	ug/kg	
	C4 alkyl benzene		17.37	3700	_	ug/kg	
	C5 alkyl benzene		17.51	3100		ug/kg	
	cycloalkane/alkene		17.77	3700		ug/kg	
	C4 alkyl benzene	_	17.87	4200			Ĩ
	Naphthalene, decahydro-methy	1	18.02	3700	_	ug/kg	Ĵ
	alkane		18.17	1000		ug/kg	_
	C4 alkyl benzene		18.35	1100			ĵ
	C5 alkyl benzene		18.41	3100		ug/kg	Ĵ
	Naphthalene, tetrahydro-	_1111	18.62	3200		ug/kg	J
01.00.0	dihydro-dimethylindene + C5	aikyidenzene		4800		ug/kg	J TŃ
91-20-3	Naphthalene		19.17 19.36	3300 3500		ug/kg	JN
	unknown Total TIC, Volatile		13.30	7300		ug/kg ug/kg	J
	Total TIC, Volatile			1300	00	ag/ ng	J

(a) Dilution required due to matrix interference.



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 3

Client Sample ID: SB-4 Lab Sample ID: JA38847-3

SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Matrix: Method:

Project:

SW846 8270C SW846 3550B

Percent Solids: 82.4

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	F86703.D	1	02/10/10	OYA	02/06/10	OP42138	EF4091
Run #2	F86740.D	20	02/12/10	LP	02/06/10	OP42138	EF4093

	Initial Weight	Final Volume	
Run #1	35.1 g	1.0 ml	
Run #2	35.1 g	1.0 ml	

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	56	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	58	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	690	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	690	42	ug/kg	
95-48-7	2-Methylphenol	· ND	69	39	ug/kg	
	3&4-Methylphenol	ND	69	44	ug/kg	
88-75-5	2-Nitrophenol	ND	170	37	ug/kg	
100-02-7	4-Nitrophenol	ND	350	58	ug/kg	
87-86-5	Pentachlorophenol	ND	350	59	ug/kg	
108-95-2	Phenol	ND	69	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
83-32-9	Acenaphthene	ND	35	10	ug/kg	
208-96-8	Acenaphthylene	ND	35	11	ug/kg	
120-12-7	Anthracene	88.1	35	12	ug/kg	
56-55-3	Benzo(a)anthracene	56.6	35	11	ug/kg	
50-32-8	Benzo(a)pyrene	33.9	35	11	ug/kg	J
205-99-2	Benzo(b)fluoranthene	49.5	35	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	32.7	35	13	ug/kg	J
207-08-9	Benzo(k)fluoranthene	40.0	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	69	13	ug/kg	
85-68-7	Butyl benzyl phthalate	47.4	69	20	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	69	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	39.3	69	16	ug/kg	J
218-01-9	Chrysene	68.9	35	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	69	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	69	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	69	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	69	10	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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Page 2 of 3

Client Sample ID: SB-4 Lab Sample ID: JA38847-3

Matrix: Method:

Project:

SO - Soil

SW846 8270C SW846 3550B

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 82.4

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAGNI	C1	Dl4	RL	MDL	Units	^
CAS No.	Compound	Result	KL	MIDL	Onits	Q
95-50-1	1,2-Dichlorobenzene	ND	69	10	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	69	9.3	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	69	7.7	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	69	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	69	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	12	ug/kg	
132-64-9	Dibenzofuran	467	69	10	ug/kg	
84-74-2	Di-n-butyl phthalate	61.7	69	7.7	ug/kg	J
117-84-0	Di-n-octyl phthalate	68.3	69	17	ug/kg	Ĭ
84-66-2	Diethyl phthalate	ND	69	12	ug/kg	•
131-11-3	Dimethyl phthalate	ND	69	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	3280	69	31	ug/kg	
206-44-0	Fluoranthene	257	35	15	ug/kg	
86-73-7	Fluorene	630	35	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	69	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.6	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	690	35	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.6	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	28.2	35	12	ug/kg	J
78-59-1	Isophorone	ND	69	9.3	ug/kg	•
91-57-6	2-Methylnaphthalene	33900 a	1400	390	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	10700 a	690	190	ug/kg	
98-95-3	Nitrobenzene	ND	69	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	69	8.4	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	21	ug/kg	
85-01-8	Phenanthrene	717	35	16	ug/kg	
129-00-0	Pyrene	208	35	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	69	9.2	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
367-12-4	2-Fluorophenol	61%	52%	30-1	09%	
4165-62-2	Phenol-d5	62%	53%	28-1		
118-79-6	2,4,6-Tribromophenol	63%	57%	28-1		
4165-60-0	Nitrobenzene-d5	108%	86%	28-1		
321-60-8	2-Fluorobiphenyl	72%	81%	38-1		
341-00-0	2-1 Judi obipilenyi	14/0	01/0	30-1	01/0	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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Page 3 of 3

Client Sample ID: SB-4

Lab Sample ID:

Matrix:

JA38847-3 SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Method: Project:

SW846 8270C SW846 3550B

Percent Solids: 82.4

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1718-51-0	Terphenyl-d14	75%	88%	31-116%	
CAS No.	Tentatively Identified Compo	ounds	R.T.	Est. Conc.	Units Q
	system artifact		3.67	5000	ug/kg J
	system artifact		3.90	2200	ug/kg J
	alkane		4.06	1700	ug/kg J
	alkane		4.28	3300	ug/kg J
•	alkane		4.31	2100	ug/kg J
	alkane		4.38	2600	ug/kg J
	C4 alkyl benzene		4.50	3500	ug/kg J
	alkane		4.72	1500	ug/kg J
	alkane		5.76	2800	ug/kg J
	unknown		6.98	2800	ug/kg J
	alkene		7.08	5800	ug/kg J
	alkane		7.23	3500	ug/kg J
	alkane		7.35	5600	ug/kg J
	alkane		7.60	20000	ug/kg J
	Naphthalene dimethyl		7.69	6400	ug/kg J
	Naphthalene dimethyl		7.84	11000	ug/kg J
	alkene		7.97	5000	ug/kg J
	alkane		8.07	5700	ug/kg J
	alkane		8.13	1900	ug/kg J
	alkane		8.40	9700	ug/kg J
	Naphthalene trimethyl		8.73	1800	ug/kg J
	alkene		8.80	2000	ug/kg J
	unknown		9.25	4300	ug/kg J
	alkane		9.88	2000	ug/kg J
	alkane		9.92	1700	ug/kg J
	Total TIC, Semi-Volatile			106700	ug/kg J

(a) Result is from Run# 2

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SO - Soil

Report of Analysis

Date Received: 01/29/10

Page 1 of 1

Client Sample ID: SB-4
Lab Sample ID: JA38847-3
Date Sampled: 01/29/10

Method: SW846 8082 SW846 3545 Percent Solids: 82.4 Project: Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

File ID DF Prep Date Prep Batch **Analytical Batch** Analyzed Ву 02/08/10 TDR 02/08/10 OP42148 GOA2166 Run #1 OA60034.D 1 Run #2

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2	8	

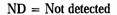
PCB List

2051-24-3

Matrix:

Compound	Result	RL	MDL	Units	Q
Aroclor 1016	ND	35	13	ug/kg	
Aroclor 1221	ND	35	23	ug/kg	
Aroclor 1232	ND	35	11	ug/kg	
Aroclor 1242	ND	35	13	ug/kg	
Aroclor 1248	ND	35	7.0	ug/kg	
Aroclor 1254 ^a	44.7	35	8.9	ug/kg	
Aroclor 1260	ND	35	14	ug/kg	
Surrogate Recoveries	Run# 1	Run# 2	Limits		
Tetrachloro-m-xylene	65%		33-14	11%	
Fetrachloro-m-xylene	57 %		33-14	11%	
Decachlorobiphenyl	88%		32-15	4 %	
	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 a Aroclor 1260 Surrogate Recoveries Cetrachloro-m-xylene	Aroclor 1016 ND Aroclor 1221 ND Aroclor 1232 ND Aroclor 1242 ND Aroclor 1248 ND Aroclor 1254 a 44.7 Aroclor 1260 ND Surrogate Recoveries Run# 1 Cetrachloro-m-xylene 65% Cetrachloro-m-xylene 57%	Aroclor 1016 ND 35 Aroclor 1221 ND 35 Aroclor 1232 ND 35 Aroclor 1242 ND 35 Aroclor 1248 ND 35 Aroclor 1254 a 44.7 35 Aroclor 1260 ND 35 Surrogate Recoveries Run# 1 Run# 2 Cetrachloro-m-xylene 65% Cetrachloro-m-xylene 57%	Aroclor 1016 ND 35 13 Aroclor 1221 ND 35 23 Aroclor 1232 ND 35 11 Aroclor 1242 ND 35 13 Aroclor 1248 ND 35 7.0 Aroclor 1254 a 44.7 35 8.9 Aroclor 1260 ND 35 14 Surrogate Recoveries Run# 1 Run# 2 Limit Cetrachloro-m-xylene 65% 33-14 Cetrachloro-m-xylene 57% 33-14	Aroclor 1016 ND 35 13 ug/kg Aroclor 1221 ND 35 23 ug/kg Aroclor 1232 ND 35 11 ug/kg Aroclor 1242 ND 35 13 ug/kg Aroclor 1248 ND 35 7.0 ug/kg Aroclor 1254 a 44.7 35 8.9 ug/kg Aroclor 1260 ND 35 14 ug/kg Aroclor 1260 ND 35 14 ug/kg Cetrachloro-m-xylene 65% 33-141% Cetrachloro-m-xylene 57% 33-141%

74%



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

Decachlorobiphenyl

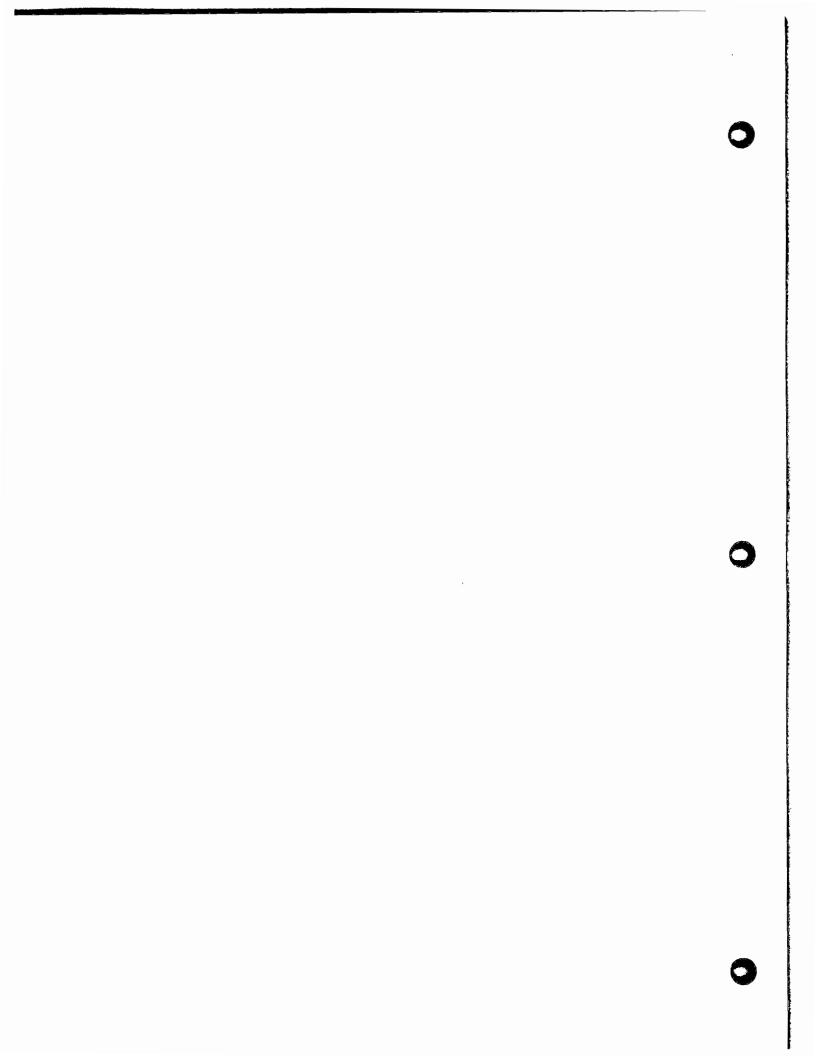
J = Indicates an estimated value

32-154%

B = Indicates analyte found in associated method blank



⁽a) Reported from 2nd signal. %D of end check (ECC) on 1st signal excess method criteria (15 %) so using for confirmation only.



Page 1 of 1

Client Sample ID: SB-4

Lab Sample ID: JA38847-3 Matrix: SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 82.4

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	Ву	Method	Prep Method
Aluminum	15000	23	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B ⁴
Antimony a	< 4.7	4.7	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Arsenic a	24.5	4.7	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Barium	113	23	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Beryllium	0.92	0.23	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Cadmium ^a	< 1.2	1.2	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B ⁴
Calcium	3590	580	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Chromium a	21.7	2.3	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B ⁴
Cobalt	62.7	5.8	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Copper a	37.0	5.8	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Iron	80800	23	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Lead a	16.5	4.7	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Magnesium	584	580	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Manganese a	2870	3.5	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Mercury	0.038	0.038	mg/kg	. 1	02/12/10	02/12/10	JW	SW846 7471A ²	SW846 7471A ⁵
Nickel	53.6	4.7	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Potassium	< 1200	1200	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Selenium ^a	< 4.7	4.7	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B ⁴
Silver a	< 1.2	1.2	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Sodium	< 1200	1200	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B 4
Thallium a	< 2.3	2.3	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B ³	SW846 3050B 4
Vanadium a	13.1	12	mg/kg	2	02/09/10	02/11/10	GT	SW846 6010B 3	SW846 3050B 4
Zinc	86.6	2.3	mg/kg	1	02/09/10	02/10/10	ND	SW846 6010B ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA23847 (2) Instrument QC Batch: MA23849 (3) Instrument QC Batch: MA23851 (4) Prep QC Batch: MP51525 (5) Prep QC Batch: MP51546

(a) Elevated detection limit due to dilution required for high interfering element.

Page 1 of 2

Client Sample ID: SB-5 Lab Sample ID:

JA38847-4 Matrix: SO - Soil

SW846 8260B Method:

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 84.9

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1 a	1C74379.D	1	02/12/10	MAH	n/a	n/a	V1C3239
Dun #2							

Kun #2

Final Volume Methanol Aliquot Initial Weight 10.0 ml 100 ul Run #1 4.4 g

Run #2

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1400	320	ug/kg	
71-43-2	Benzene	5700	140	49	ug/kg	
75-27-4	Bromodichloromethane	ŇD	710	37	ug/kg	
75-25-2	Bromoform	ND	710	22	ug/kg	
74-83-9	Bromomethane	ND	710	58	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1400	280	ug/kg	
75-15-0	Carbon disulfide	ND	710	44	ug/kg	
56-23-5	Carbon tetrachloride	1020	710	79	ug/kg	
108-90-7	Chlorobenzene	64.1	710	48	ug/kg	J
75-00-3	Chloroethane	ND	710	140	ug/kg	
67-66-3	Chloroform	2990	710	45	ug/kg	
74-87-3	Chloromethane	ND	710	24	ug/kg	
124-48-1	Dibromochloromethane	ND	710	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	710	20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	710	94	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1970	710	34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	710	64	ug/kg	
540-59-0	1,2-Dichloroethene (total)	1970	710	34	ug/kg	
78-87-5	1,2-Dichloropropane	ND	710	19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	710	19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	710	14	ug/kg	
100-41-4	Ethylbenzene	232	140	53	ug/kg	
591-78-6	2-Hexanone	ND	710	140	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	710	120	ug/kg	
75-09-2	Methylene chloride	ND	710	32	ug/kg	
100-42-5	Styrene	ND	710	15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	710	42	ug/kg	
127-18-4	Tetrachloroethene	39.0	710	21	ug/kg	J
108-88-3	Toluene	106	140	42	ug/kg	J J
71-55-6	1,1,1-Trichloroethane	ND	710	18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	710	26	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 2 of 2

Client Sample ID: SB-5 Lab Sample ID:

JA38847-4 SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Matrix: Method:

SW846 8260B

Percent Solids: 84.9

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

VOA TCL List

		- 1.					_	
CAS No.	Compound	Result	RL	M	DL	Units	Q	
79-01-6	Trichloroethene	3270	710	75		ug/kg		
75-01-4	Vinyl chloride	ND	710	25		ug/kg		
1330-20-7	Xylene (total)	2060	290	67		ug/kg		
						0 0		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2		Limit	s		
1868-53-7	Dibromofluoromethane	99%			67-12	7%		
17060-07-0	1,2-Dichloroethane-D4	105 %			65-13	2%		
2037-26-5	Toluene-D8	101%			74-12	9%		
460-00-4	4-Bromofluorobenzene	99%			62-13	8%		
::						_	•	
CAS No.	Tentatively Identified Compo	unds	R.T.		Est. (Conc.	Units	Q
95-63-6	Benzene, 1,2,4-trimethyl-		17.12		6500		ug/kg	IN
	cycloalkane/alkene		17.33		8700		ug/kg	
	alkane		17.79		19000)	ug/kg	
	C4 alkyl benzene		18.25		5600		ug/kg	J
	C5 alkyl benzene		18.38		6200		ug/kg	J
	Naphthalene decahydro-methyl	l	18.64		6900		ug/kg	
	C4 alkyl benzene		18.76		8300		ug/kg	J
	Naphthalene decahydro-methyl	l	18.89		7200		ug/kg	J
	alkane		18.95		8700		ug/kg	
	C4 alkyl benzene		19.25		17000)	ug/kg	J
	Naphthalene tetrahydro		19.53		6400		ug/kg	
	unknown		19.61		8100		ug/kg	
	1H-Indene-dihydro-trimethyl		19.69		8000			
91-20-3	Naphthalene		20.11		7400		ug/kg	
	Naphthalene, methyl-		21.44		6100	30	ug/kg	-
	Total TIC, Volatile				13010	JU	ug/kg	J

(a) Dilution required due to matrix interference.



ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Page 1 of 3

Client Sample ID: SB-5 Lab Sample ID:

JA38847-4

Matrix: Method:

Project:

SO - Soil

SW846 8270C SW846 3550B

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 84.9

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	F86704.D	1	02/10/10	OYA	02/06/10	OP42138	EF4091
Run #2	F86741.D	20	02/12/10	LP	02/06/10	OP42138	EF4093

	Initial Weight	Final Volume	
Run #1	35.0 g	1.0 ml	
Run #2	35.0 g	1.0 ml	

ABN TCL List

CAS No.	Compound	Result	RL .	MDL	Units	Q	
95-57-8	2-Chlorophenol	ND	170	34	ug/kg		
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg		
120-83-2	2,4-Dichlorophenol	ND	170	54	ug/kg		
105-67-9	2,4-Dimethylphenol	ND	170	57	ug/kg		
51-28-5	2,4-Dinitrophenol	ND	670	41	ug/kg		
534-52-1	4,6-Dinitro-o-cresol	ND ·	670	41	ug/kg		
95-48-7	2-Methylphenol	ND	67	38	ug/kg		
	3&4-Methylphenol	ND	67 .	43	ug/kg		
88-75-5	2-Nitrophenol	ND	170	36	ug/kg		
100-02-7	4-Nitrophenol	ND	340	57	ug/kg		
87-86-5	Pentachlorophenol	ND	340	58	ug/kg		
108-95-2	Phenol	ND	67	35	ug/kg		
95-95-4	2,4,5-Trichlorophenol	ND	170	39	ug/kg		
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg		
83-32-9	Acenaphthene	392	34	9.8	ug/kg		
208-96-8	Acenaphthylene	ND	34	11	ug/kg		
120-12-7	Anthracene	80.9	34	12	ug/kg		
56-55-3	Benzo(a)anthracene	66.8	34	11	ug/kg		
50-32-8	Benzo(a)pyrene	26.9	34	10	ug/kg	J	
205-99-2	Benzo(b)fluoranthene	45.2	34	11	ug/kg		
191-24-2	Benzo(g,h,i)perylene	27.9	34	13	ug/kg	J J	
207-08-9	Benzo(k)fluoranthene	32.4	34	13	ug/kg	J	
101-55-3	4-Bromophenyl phenyl ether	ND	67	12	ug/kg		
85-68-7	Butyl benzyl phthalate	99.7	67	19	ug/kg		
91-58-7	2-Chloronaphthalene	ND	67	10	ug/kg		
106-47-8	4-Chloroaniline	ND	170	11	ug/kg		
86-74-8	Carbazole	ND	67	16	ug/kg		
218-01-9	Chrysene	64.7	34	11	ug/kg		
111-91-1	bis(2-Chloroethoxy)methane	ND	67	14	ug/kg		
111-44-4	bis(2-Chloroethyl)ether	ND	67	10	ug/kg		
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	10	ug/kg		
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	10	ug/kg		

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

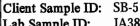
E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Page 2 of 3



Lab Sample ID: JA38847-4

Matrix: Method:

Project:

SO - Soil

SW846 8270C SW846 3550B

Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 84.9

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

ADIA TOD I	2150					
CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	67	9.7	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	67	9.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	67	7.5	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	67	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	67	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.5	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	· 11	ug/kg	
132-64-9	Dibenzofuran	749	67	10	ug/kg	
84-74-2	Di-n-butyl phthalate	89.9	67	7.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	16	ug/kg	
84-66-2	Diethyl phthalate	ND	67	11	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	6690 a	1300	590	ug/kg	
206-44-0	Fluoranthene	332	34	15	ug/kg	
86-73-7	Fluorene	889	34	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	9.4	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	670	34	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.4	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	23.1	34	12	ug/kg	J
78-59-1	Isophorone	ND	67	9.1	ug/kg	
91-57-6	2-Methylnaphthalene	44000 a	1300	380	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	.13	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	13300 a	670	180	ug/kg	
98-95-3	Nitrobenzene	ND	67	9.7	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	8.2	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	1140	34	15	ug/kg	
129-00-0	Pyrene	240	34	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	67	9.0	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
367-12-4	2-Fluorophenol	62%	58 %	30-1	109%	
4165-62-2	Phenol-d5	61%	59 %	28-1	l 08 %	
118-79-6	2,4,6-Tribromophenol	59 %	60%	28-1	25%	
4165-60-0	Nitrobenzene-d5	109%	101%	28-113%		
321-60-8	2-Fluorobiphenyl	<i>77</i> %	93%	38-1	107 %	

ND = Not detected

MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 3 of 3

Client Sample ID: SB-5

Lab Sample ID: JA38847-4

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: 84.9

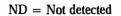
Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1718-51-0	Terphenyl-d14	77%	96%	31-116%		
CAS No.	Tentatively Identified Compounds		R.T.	Est. Conc.	Units	Q
	alkane alkane cycloalkane/alkene alkane C4 alkyl benzene alkane alkane C4 alkyl benzene alkane		3.67 3.90 4.01 4.06 4.28 4.31 4.38 4.49 4.73 5.77 6.44 7.09 7.13 7.25 7.37 7.62 7.70 7.86 7.98 8.09 8.14 8.81 9.50 9.88 9.93	5600 2300 1600 1900 3600 1900 2700 3600 1600 3000 2000 4200 6400 20000 6400 9900 5200 5900 1900 1500 1400 2200	ug/kg	
	Total TIC, Selli-Volatile			104300	ug/kg	J

(a) Result is from Run# 2



MDL - Method Detection Limit



RL = Reporting Limit

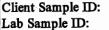
E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1



SB-5

Date Sampled: 01/29/10

Prep Date

02/08/10

JA38847-4 SO - Soil

Date Received: 01/29/10

Matrix: Method:

SW846 8082 SW846 3545

DF

1

Percent Solids: 84.9

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

By

TDR

Analyzed

02/08/10

Analytical Batch Prep Batch OP42148 GOA2166

Run #1 Run #2

Initial Weight

File ID

OA60035.D

Final Volume

Run #1 17.1 g 10.0 ml

Run #2

PCB List

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MDL - Method Detection Limit



E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 1 of 1

Client Sample ID: SB-5 Lab Sample ID: JA38

JA38847-4

JA38847-4 SO - Soil Date Sampled: 01/29/10 Date Received: 01/29/10

Percent Solids: 84.9

Project:

Matrix:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14200	25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Antimony	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Arsenic	26.2	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Barium	50.3	25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B 4
Beryllium	3.5	0.25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Cadmium	< 0.62	0.62	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Calcium	< 620	620	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Chromium	14.9	1.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Cobalt	55.7	6.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Copper	27.9	3.1	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Iron	64300	25	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Lead	17.6	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Magnesium	< 620	620	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Manganese	604	1.8	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Mercury	< 0.038	0.038	mg/kg	1	02/12/10	02/12/10 JW	SW846 7471A ²	SW846 7471A ⁵
Nickel	103	4.9	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Potassium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Selenium	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Thallium a	< 2.5	2.5	mg/kg	2	02/09/10	02/11/10 GT	SW846 6010B ³	SW846 3050B ⁴
Vanadium	16.5	6.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴
Zinc	435	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA23847
(2) Instrument QC Batch: MA23849
(3) Instrument QC Batch: MA23851
(4) Prep QC Batch: MP51525
(5) Prep QC Batch: MP51546

(a) Elevated detection limit due to dilution required for high interfering element.



Page 1 of 2

Client Sample ID: SB-6 Lab Sample ID: JA38

JA38847-5 SO - Soil Date Sampled: 01/29/10 Date Received: 01/29/10

SU - S011 SW846 8260B

Percent Solids: 83.0

Method: Project:

Matrix:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1 a	D165151.D	1	02/10/10	TDN	n/a	n/a	VD6652
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
	5.9 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1100	250	ug/kg	
71-43-2	Benzene	ND	. 110	38	ug/kg	
75-27-4	Bromodichloromethane	ND	560	29	ug/kg	
75-25-2	Bromoform	ND	560	17	ug/kg	
74-83-9	Bromomethane	ND	560	45	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1100	220	ug/kg	
75-15-0	Carbon disulfide	ND	560	34	ug/kg	
56-23-5	Carbon tetrachloride	ND	560	62	ug/kg	
108-90-7	Chlorobenzene	74.9	560	38	ug/kg	J
75-00-3	Chloroethane	ND	560	110	ug/kg	
67-66-3	Chloroform	ND	560	36	ug/kg	
74-87-3	Chloromethane	ND	560	19	ug/kg	
124-48-1	Dibromochloromethane	ND	560	12	ug/kg	
75-34-3	1,1-Dichloroethane	ND	560	16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	39	ug/kg	
75-35-4	1,1-Dichloroethene	ND	560	74	ug/kg	
156-59-2	cis-1,2-Dichloroethene	738	560	27	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	560	50	ug/kg	
540-59-0	1,2-Dichloroethene (total)	738	560	27	ug/kg	
78-87-5	1,2-Dichloropropane	ND.	560	15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	560	15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	560	11	ug/kg	
100-41-4	Ethylbenzene	154	110	42	ug/kg	
591-78-6	2-Hexanone	ND	560	110	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	560	91	ug/kg	
75-09-2	Methylene chloride	ND	560	25	ug/kg	
100-42-5	Styrene	ND	560	12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	560	33	ug/kg	
127-18-4	Tetrachloroethene	50.2	560	16	ug/kg	J
108-88-3	Toluene	ND	110	33	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	560	14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	560	21	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 2 of 2

Client Sample ID: SB-6 Lab Sample ID:

JA38847-5

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method: Project:

SW846 8260B

Percent Solids: 83.0 Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

VOA TCL List

CAS No.	Compound F	Result	RL	MDL	Units	Q	
79-01-6	Trichloroethene 4	660	560	59	ug/kg		
75-01-4	Vinyl chloride N	ND	560	20	ug/kg		
1330-20-7	•	753	220	53	ug/kg		
CAS No.	Surrogate Recoveries F	Run# 1	Run# 2	Limit	s		
1868-53-7	Dibromofluoromethane 9	0%		67-12	7%		
17060-07-0	1,2-Dichloroethane-D4	.06%		65-13	2%		
2037-26-5	Toluene-D8 9	0%		74-12	9%		
460-00-4	4-Bromofluorobenzene 1	08%		62-13	8%		
CAS No.	Tentatively Identified Compoun	nds	R.T.	Est.	Conc.	Units	Q
	alkane		15.69	35000		ug/kg	, J
	alkane		16.03	17000)	ug/kg	J
	cycloalkane/alkene		16.47	21000)	ug/kg	J
	alkane		17.00	68000)	ug/kg	J
	Naphthalene, decahydro-		17.10	21000)	ug/kg	J
	C4 alkyl benzene		17.37	22000)	ug/kg	J
	C4 alkyl benzene		17.72	15000)	ug/kg	J
	cycloalkane/alkene		17.76	40000)	ug/kg	J
	C4 alkyl benzene		17.87	24000)		J
	alkane		18.17	46000		ug/kg	J
	alkane		18.34	59000		0 0	J
	dihydro-dimethylindene + C5 al	kylbenzene		15000		ug/kg	J
	C5 alkyl benzene		18.87	21000			J
	cycloalkane/alkene		18.98	15000		ug/kg	Ī
	unknown		19.35	21000		ug/kg	ĵ
	Total TIC, Volatile			44000	JU	ug/kg	J

(a) Dilution required due to matrix interference.



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 3

Client Sample ID: SB-6 Lab Sample ID:

JA38847-5

Date Sampled: 01/29/10 Date Received: 01/29/10

Matrix:

SO - Soil

Percent Solids: 83.0

Method:

SW846 8270C SW846 3550B

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	F86705.D	1	02/10/10	OYA	02/06/10	OP42138	EF4091
Run #2	F86742.D	4	02/12/10	LP	02/06/10	OP42138	EF4093

	Initial Weight	Final Volume
Run #1	35.3 g	1.0 ml
Run #2	35.3 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND ,	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	55	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	57	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	680	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	680	42	ug/kg	
95-48-7	2-Methylphenol	ND	68	39	ug/kg	
	3&4-Methylphenol	ND	68	43	ug/kg	
88-75-5	2-Nitrophenol	ND	170	36	ug/kg	
100-02-7	4-Nitrophenol	ND	340	58	ug/kg	
87-86-5	Pentachlorophenol	ND	340	58	ug/kg	
108-95-2	Phenol	ND	68	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg	
83-32-9	Acenaphthene	ND	34	9.9	ug/kg	
208-96-8	Acenaphthylene	ND	34	11	ug/kg	
120-12-7	Anthracene	46.9	34	12	ug/kg	
56-55-3	Benzo(a)anthracene	20.9	34	11	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	34	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	34	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	34	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	34	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	68	12	ug/kg	
85-68-7	Butyl benzyl phthalate	38.1	68	20	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	68	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	68	16	ug/kg	
218-01-9	Chrysene	17.6	34	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	68	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	68	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	68	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	68	10	ug/kg	

ND = Not detected

MDL - Method Detection Limit

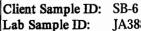
RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 2 of 3



JA38847-5

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: 83.0

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CACAT		Domile	RL	MOT	YT !4	
CAS No.	Compound	Result	KL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	43.8	68	9.8	ug/kg	J
541-73-1	1,3-Dichlorobenzene	ND	68	9.1	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	68	7.6	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	68	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	68	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	8.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	12	ug/kg	
132-64-9	Dibenzofuran	149	68	10	ug/kg	
84-74-2	Di-n-butyl phthalate	35.7	68	7.6	ug/kg	J
117-84-0	Di-n-octyl phthalate	ND	68	17	ug/kg	
84-66-2	Diethyl phthalate	ND	68	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	68	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	1560	68	30	ug/kg	
206-44-0	Fluoranthene	77.7	34	15	ug/kg	
86-73-7	Fluorene	245	34	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	68	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	9.5	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	680	35	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	34	12	ug/kg	
78-59-1	Isophorone	ND	68	9.2	ug/kg	
91-57-6	2-Methylnaphthalene	6260 a	270	76	ug/kg	
88-74-4	2-Nitroaniline	ND	170	.15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	986	34	9.3	ug/kg	
98-95-3	Nitrobenzene	ND	68	9.9	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	68	8.3	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	327	34	16	ug/kg	
129-00-0	Pyrene	64.6	34	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	68	9.1	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
367-12-4	2-Fluorophenol	61%	54%	30-1	09%	
4165-62-2	Phenol-d5	61%	57 %	28-1	08%	
118-79-6	2,4,6-Tribromophenol	60 % ,	60%	28-1	25%	
4165-60-0	Nitrobenzene-d5	77 %	74%	28-1	13%	
321-60-8	2-Fluorobiphenyl	75 %	71%	38-107%		

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

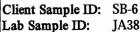
J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 3 of 3



JA38847-5

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: 83.0

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1718-51-0	Terphenyl-d14	72%	72%	31-116%		
CAS No.	Tentatively Identified Compounds		R.T.	Est. Conc.	Units	Q
CAS NO.	alkane alkane alkane alkane alkane alkane cycloalkane/alkene alkane alkane alkane alkane Naphthalene methyl Naphthalene tetrahydro-methyl alkane alkane Naphthalene dimethyl Alkane		3.66 4.30 4.66 5.65 5.78 6.04 6.14 6.25 6.34 6.79 6.83 7.00 7.15 7.49 7.61 7.75 7.78 7.91 8.00	2100 920 7600 3900 2200 1400 1700 1400 4100 1100 960 1500 4800 1400 2200 2200 2700 2600	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
	alkane alkane alkane alkane unknown unknown Total TIC, Semi-Volatile		8.07 8.32 9.47 9.90 10.04 15.57	1100 3000 1200 1500 1100 1000 55180]

(a) Result is from Run# 2



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-6

Lab Sample ID: JA38847-5

Matrix: Method: SO - Soil

SW846 8082 SW846 3545

Date Sampled: 01/29/10

Date Received: 01/29/10

Percent Solids: 83.0

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Prep Batch Analytical Batch

Run #1

File ID OA60036.D DF 1

Analyzed Ву 02/08/10 **TDR** Prep Date 02/08/10

OP42148

Q

GOA2166

Run #2

Initial Weight

Final Volume

Run #1 17.2 g

10.0 ml

Run #2

PCB List

CAS No.	Compound	Result	RL	MDL	Units
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ND ND ND ND ND ND ND	35 35 35 35 35 35 35	12 23 11 13 6.9 8.8 14	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		33-141%
877-09-8	Tetrachloro-m-xylene	51%		33-141%
2051-24-3	Decachlorobiphenyl	87 %		32-154%
2051-24-3	Decachlorobiphenyl	148%		32-154%



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-6 Lab Sample ID: JA3884

JA38847-5 SO - Soil Date Sampled: 01/29/10
Date Received: 01/29/10

Percent Solids: 83.0

Project:

Matrix:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	15100	25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Arsenic	10.3	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Barium	65.4	25	mg/kg	1 '	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Beryllium	1.1	0.25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.63	0.63	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Calcium	781	630	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Chromium	9.2	1.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B 1	SW846 3050B ³
Cobalt	23.7	6.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B 3
Copper	29.4	3.2	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Iron	35000	13	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Lead	14.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Magnesium	644	630	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Manganese	814	1.9	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B 3
Mercury	< 0.036	0.036	mg/kg	1	02/12/10	02/12/10 JW	SW846 7471A ²	SW846 7471A ⁴
Nickel	34.0	5.0	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Potassium	< 1300	1300	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Silver	< 0.63	0.63	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Vanadium	11.5	6.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Zinc	79.0	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³

(1) Instrument QC Batch: MA23847(2) Instrument QC Batch: MA23849(3) Prep QC Batch: MP51525(4) Prep QC Batch: MP51546



Page 1 of 2

Client Sample ID: SB-7 Lab Sample ID:

JA38847-6

Date Sampled: 01/29/10 Date Received: 01/29/10

Matrix: Method: SO - Soil SW846 8260B

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

By

TDN

File ID Run #1 a D165187.D DF Analyzed 02/11/10

Prep Date n/a

Prep Batch n/a

Analytical Batch VD6654

Run #2

Final Volume Initial Weight 4.6 g

Methanol Aliquot

1

10.0 ml 100 ul

Run #1 Run #2

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1500	330	ug/kg	
71-43-2	Benzene	ND	150	50	ug/kg	
75-27-4	Bromodichloromethane	ND	730	38	ug/kg	
75-25-2	Bromoform	ND	730	22	ug/kg	
74-83-9	Bromomethane	ND	730	59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1500	290	ug/kg	
75-15-0	Carbon disulfide	107	730	45 ·	ug/kg	J
56-23-5	Carbon tetrachloride	ND	730	82	ug/kg	
108-90-7	Chlorobenzene	ND	730	50	ug/kg	
75-00-3	Chloroethane	ND	730	150	ug/kg	
67-66-3	Chloroform	ND	730	47	ug/kg	
74-87-3	Chloromethane	ND	730	24	ug/kg	
124-48-1	Dibromochloromethane	ND	730	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	730	20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	150	51	ug/kg	
75-35-4	1,1-Dichloroethene	ND	730	97	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	730	35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	730	66	ug/kg	,
540-59-0	1,2-Dichloroethene (total)	ND	730	35	ug/kg	
78-87-5	1,2-Dichloropropane	ND	730	19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	730	20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	730	14	ug/kg	
100-41-4	Ethylbenzene	149	150	54	ug/kg	J
591-78-6	2-Hexanone	ND	730	140	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	730	120	ug/kg	
75-09-2	Methylene chloride	ND	730	33	ug/kg	
100-42-5	Styrene	ND	730	16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	730	43	ug/kg	
127-18-4	Tetrachloroethene	ND	730	21	ug/kg	
108-88-3	Toluene	82.4	150	43	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	730	19	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND ·	730	27	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

 Client Sample ID:
 SB-7

 Lab Sample ID:
 JA38847-6
 Date Sampled:
 01/29/10

 Matrix:
 SO - Soil
 Date Received:
 01/29/10

 Method:
 SW846 8260B
 Percent Solids:
 80.6

 Project:
 Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA



VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q	
79-01-6	Trichloroethene	ND	730	77	ug/kg	ţ	
75-01-4	Vinyl chloride	ND	730	26	ug/kg		
1330-20-7	Xylene (total)	198	290	69	ug/kg	•	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts		
1868-53-7	Dibromofluoromethane	92%		67-12	27%		
17060-07-0	1,2-Dichloroethane-D4	108%		65-13	32%		
2037-26-5	Toluene-D8	90%		74-12	29%		
460-00-4	4-Bromofluorobenzene	92%		62-13	38%		
CAS No.	Tentatively Identified Comp	ounds	R.T.	Est.	Conc.	Units	Q
	alkane		18.16	1300		ug/kg	J
	alkane		18.34	800		ug/kg	
	alkane		19.30	1200		ug/kg	
	unknown		16.61	7300		ug/kg	
	Total TIC, Volatile			1060	0	ug/kg	

(a) Diluted due to high concentration of non-target compound.

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 3

Client Sample ID: SB-7

Lab Sample ID:

JA38847-6

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

Date Sampled: 01/29/10

Date Received: 01/29/10

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Analyzed

02/10/10

Prep Batch

Analytical Batch

Run #1

File ID

F86706.D

OYA

By

Prep Date 02/06/10

OP42138

EF4091

Run #2

Initial Weight

Final Volume

Run #1 35.0 g 1.0 ml

DF

1

Run #2

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	57	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	60	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	710	43	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	710	43	ug/kg	
95-48-7	2-Methylphenol	ND	71	40	ug/kg	
	3&4-Methylphenol	ND	71	45	ug/kg	
88-75-5	2-Nitrophenol	ND	180	38	ug/kg	
100-02-7	4-Nitrophenol	ND	350	60	ug/kg	
87-86-5	Pentachlorophenol	ND	350	61	ug/kg	
108-95-2	Phenol	ND	71	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	41	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	33	ug/kg	
83-32-9	Acenaphthene	70.0	35	. 10	ug/kg	
208-96-8	Acenaphthylene	ND	35	11	ug/kg	
120-12-7	Anthracene	13.2	35	12	ug/kg	J
56-55-3	Benzo(a)anthracene	ND	35	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	21	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	11	ug/kg	
106-47-8	4-Chloroaniline	ND	180	11	ug/kg	
86-74-8	Carbazole	ND	71	16	ug/kg	
218-01-9	Chrysene	ND	35	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	71	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	11	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



46 AF 57

Page 2 of 3

Client Sample ID: SB-7 Lab Sample ID:

JA38847-6

Date Sampled: 01/29/10

Matrix:

SO - Soil

Date Received: 01/29/10

Method:

SW846 8270C SW846 3550B

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	97.6	71	10	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	71	9.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	70.1	71	7.9	ug/kg	J
121-14-2	2,4-Dinitrotoluene	ND	71	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	71	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	180	9.0	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	12	ug/kg	
132-64-9	Dibenzofuran	124	71	11	ug/kg	
84-74-2	Di-n-butyl phthalate	329	71	7.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	17	ug/kg	
84-66-2	Diethyl phthalate	ND	71	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	1890	71	31	ug/kg	
206-44-0	Fluoranthene	22.0	35	16	ug/kg	J
86-73-7	Fluorene	188	35	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.9	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	710	36	ug/kg	
67-72-1	Hexachloroethane	ND	180	9.9	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	12	ug/kg	
78-59-1	Isophorone	ND	71	9.5	ug/kg	
91-57-6	2-Methylnaphthalene	2290	71	20	ug/kg	
88-74-4	2-Nitroaniline	ND	180	16	ug/kg	
99-09-2	3-Nitroaniline	ND	180	14	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
91-20-3	Naphthalene	661	35	9.7	ug/kg	
98-95-3	Nitrobenzene	ND	71	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	8.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	21	ug/kg	
85-01-8	Phenanthrene	223	35	16	ug/kg	
129-00-0	Pyrene	30.6	35 ·	14	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	49.1	71	9.4	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
367-12-4	2-Fluorophenol	45%		30-1	09%	
4165-62-2	Phenol-d5	43%		28-1	08%	
118-79-6	2,4,6-Tribromophenol	43%			25 %	
4165-60-0	Nitrobenzene-d5	55 %			13%	
321-60-8	2-Fluorobiphenyl	54 %		38-1	07%	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 3 of 3

Client Sample ID: SB-7

Lab Sample ID: JA38847-6

SO - Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

Matrix: Method:

SW846 8270C SW846 3550B

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1718-51-0	Terphenyl-d14	50%		31-116%		
CAS No.	Tentatively Identified Compe	ounds	R.T.	Est. Conc.	Units	Q
320-60-5 90-12-0	system artifact Benzene, 2,4-dichloro-1-(trifficalkane alkane alkane Naphthalene, 1-methyl- alkene alkane Naphthalene dimethyl Naphthalene dimethyl Naphthalene dimethyl Naphthalene dimethyl alkane Phenol, -(-tetramethylbuty alkane unknown		3.66 3.96 4.65 5.64 5.76 6.32 6.78 6.98 7.14 7.47 7.60 7.74 7.77 7.99 9.22 9.85 9.91 9.98	1200 18000 3400 2800 920 1900 1100 770 890 3500 1900 1700 980 1700 970 850 1400	ug/kg]]]]]]]]]]]]
10544-50-0	Phenol, nonyl- Phenol, nonyl- unknown unknown Cyclic octaatomic sulfur unknown Total TIC, Semi-Volatile		10.04 10.09 10.26 10.32 10.39 12.33 13.67	2000 930 920 1200 1300 1100 890 52820	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J J JN J



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-7

Lab Sample ID:

JA38847-6

SO - Soil

Date Sampled: 01/29/10

Matrix:

Date Received: 01/29/10

Method:

SW846 8082 SW846 3545

1

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Analytical Batch

Run #1

File ID OA60037.D DF Analyzed 02/08/10

By TDR 02/08/10

Prep Date Prep Batch OP42148

GOA2166

Run #2

Initial Weight

17.1 g

10.0 ml

Final Volume

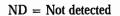
Run #1 Run #2

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
	-	,				

	•		•		
12674-11-2	Aroclor 1016	ND	36	13	ug/kg
11104-28-2	Aroclor 1221	ND	36	24	ug/kg
11141-16-5	Aroclor 1232	ND	36	12	ug/kg
53469-21-9	Aroclor 1242	ND	36	13	ug/kg
12672-29-6	Aroclor 1248	ND	36	7.2	ug/kg
11097-69-1	Aroclor 1254	ND	36	9.1	ug/kg
11096-82-5	Aroclor 1260	ND	36	14	ug/kg

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		33-141%
877-09-8	Tetrachloro-m-xylene	59 %		33-141%
2051-24-3	Decachlorobiphenyl	86%		32-154%
2051-24-3	Decachlorobiphenyl	73 %		32-154%



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: SB-7

Lab Sample ID: Matrix:

JA38847-6 SO - Soil

Date Sampled: 01/29/10

Date Received: 01/29/10

Percent Solids: 80.6

Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	23900	25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Arsenic	10.1	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Barium	166	25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Beryllium	1.1	0.25	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.63	0.63	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Calcium	1450	630	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Chromium	22.1	1.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Cobalt	26.4	6.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Copper	32.2	3.1	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ^{. 3}
Iron	46400	13	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Lead	19.7	2.5	mg/kg	1	02/09/10		SW846 6010B ¹	SW846 3050B ³
Magnesium	1650	630	mg/kg	1	02/09/10		SW846 6010B ¹	SW846 3050B ³
Manganese	914	1.9	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Mercury	< 0.038	0.038	mg/kg	1	02/12/10	02/12/10 JW	SW846 7471A ²	SW846 7471A 4
Nickel	33.1	5.0	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Potassium	1320	1300	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Silver	< 0.63	0.63	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Vanadium	26.9	6.3	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³
Zinc	70.1	2.5	mg/kg	1	02/09/10	02/10/10 ND	SW846 6010B ¹	SW846 3050B ³

(1) Instrument QC Batch: MA23847 (2) Instrument QC Batch: MA23849 (3) Prep QC Batch: MP51525 (4) Prep QC Batch: MP51546



Page 1 of 2

Client Sample ID: TRIP BLANK Lab Sample ID:

JA38847-7

AQ - Trip Blank Soil

Date Sampled: 01/29/10 Date Received: 01/29/10

SW846 8260B

Percent Solids: n/a

Method: Project:

Matrix:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	1A85811.D	1	02/03/10	TGE	n/a	n/a	V1A3659
Run #2							

|Kun #2

Purge Volume

Run #1 5.0 ml

Run #2

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87- 5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

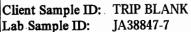
J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 2 of 2



Matrix:

JA38847-7 AQ - Trip Blank Soil Date Sampled: 01/29/10 Date Received: 01/29/10

SW846 8260B

Percent Solids: n/a

Method: Project:

Venezia, 3987 Easton Nazareth Highway (Route 248), Nazareth, PA

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l		
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/I		
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its		
1868-53-7	Dibromofluoromethane	102%		76-1	20%		
17060-07-0	1,2-Dichloroethane-D4	94%		64-1	35%		
2037-26-5	Toluene-D8	98%		76-1	17%		
460-00-4	4-Bromofluorobenzene	81%		72-1	22%		
CAS No.	Tentatively Identified Comp	ounds	R.T.	Est.	Conc.	Units	Q
	Total TIC, Volatile			0		ug/I	



MDL - Method Detection Limit



RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound







Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

· Chain of Custody

₩	SCL		CHAI	N O	F C	UST	O	DΥ	•											PA	GE		OF	:	
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Phone #	Client Purchase	Order #	<u> </u>	City			S	State	_		Zφ		1.3	3			1		!					SOL - Other Solid WP - Wipe	
(610)524-9466 " 19482				Attention									15	ò										FB-Field Blank EB-Equipment Blank	
Sampler(s) Name(s) Phone #	Project Manager			Attention	ı.								S	٠٦										RB-Rinse Blank TB-Trip Blank	ľ
MINTO DEEDE	1		Collection	<u></u>				Numb	ex of p	cserve	d Bottle		1.5	, Ñ										/	1
Accused Field ID / Point of Collection	QEO-VOI You	Date	Tirme	Sampled by	Mark	# of bottles	ĄĞ	NaOH HXO3	H2504	NOWE DI Weter	MEOH	ENCORE	53	5										LAB USE ONLY	
1 58-2	1160 819	1/28/10	1500	RB	Se	4	П	7	П	1 2	11	\top	x										/	EXYS	ļ
2 58.5	ion 397	1/29/10	0910	RB	50	4	11	\top	П	1 2		\top	×											14 44	l
3 SB-4	1098	1/29/10	1117	RA	So	14	Ħ	1	П	1/2	1.1	1	₩.			\vdash					_			4084	1
4 56.5	1096 \$31	1/29/10	1305	RB	Sa	4	\sqcap	+	П	1 2	1.1	十	X						_				_	921	
5 53-6	1690 874	1/29/10	1452	RB	50	4	11.	1	П	1 2	1	十													1
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Turnaround Time (Business days)	(200) . TO		4888	1		Data	Deliv	erable	THO	matic	ᆜ		1	69 .		الإنهار المار	<u> </u>	Com	ments	/ Specia	d Instr	uctions	لـــ	100 P. 100 P.	
Std. 15 Business Days	Approved By (Acc				Commerc	121 "A" (L	evel 1)]	<u></u>	NASP		ory A			12	[]]/	1	1	63					
Std. 16 Business Days (by Contract only)					Commerc)	į	_	YASP	_	jory B		6.1	i)	DHEY	<u> </u>	2)		0			29-10 rf	ł
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Emergency & Rush T/A data available VIA Lablink	. ———			L		NJ Reduc	ced = F	Results	+ QC	Sum	тагу +	Partial								0 .70	1/4-	72007	Sec. 1	1000 -00	1
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JA38847: Chain of Custody Page 1 of 4



Accutest Laboratories Sample Receipt Summary

Delivery Method: Client Service Action Required at Login: No Project: No. Coolers: 1 Airbill #Fs:	Accutest Job Number: JA388	847 Client:		Immediate Client Serv	ices Action Required:	No
Cooler Security Y or N 1. Custody Seals Present:	Date / Time Received: 1/29/2	2010	Delivery Method:	Client Service Acti	on Required at Login:	No
1. Custody Seals Present:	Project:		No. Coolers:	1 Airbill #'s:		
1. Temp criteria achieved: 2. Cooler temp verification: 3. Cooler media: 1. Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for: 3. Condition of sample: 1. Trip Blank present / cooler: 2. Trip Blank listed on COC: 3. Samples preserved properly: 4. VOCs headspace free: 2. All containers accounted for: 3. Sample Integrity - Instructions 4. Compositing instructions clear: 4. Compositing instructions clear: 5. Filtering instructions clear:	1. Custody Seals Present: 2. Custody Seals Intact:	☐ 3. COC Pres☐ 4. Smp! Dates/I	ent: 🔽 🗆	Sample labels present on bottles: Container labeling complete:		
1. Trip Blank present / cooler: 2. Trip Blank listed on COC: 3. Samples preserved properly: 4. VOCs headspace free: 3. Sufficient volume recvd for analysis: 4. Compositing instructions clear: 5. Filtering instructions clear: 2. Sample Integrity - Instructions Y or N N/A 1. Analysis requested is clear: 2. Bottles received for unspecified tests 3. Sufficient volume recvd for analysis: 4. Compositing instructions clear: 5. Filtering instructions clear:	Temp criteria achieved: Cooler temp verification: Cooler media:	Infared gun		Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for:	Y or N.	
	1. Trip Blank present / cooler: 2. Trip Blank listed on COC: 3. Samples preserved properly:			Sample Integrity - Instructions 1. Analysis requested is clear. 2. Bottles received for unspecified tests 3. Sufficient volume recyd for analysis: 4. Compositing instructions clear:	Y or N	V
Acoutest Laboratories 2235 US Highway 130 Dayton, New Jersey	Comments					

JA38847: Chain of Custody Page 2 of 4

Job Change Order:

JA38847_2/26/2010

Requested Date:

2/26/2010

Received Date:

1/29/2010

Account Name:

Earth Data Northeast

Due Date:

2/12/2010

Project Description:

Venezia, 3987 Easton Nazareth Highway (Route

Deliverable: TAT (Days): COMMA 14

Sample #:

CSR:

JA38847-Ali

Above Changes

Change:

Upgrade to FULT1.

JA38847: Chain of Custody

Page 3 of 4

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Ryan Beebe

Page 1 of 1

Date: 2/26/2010

DATA VALIDATION REPORT VENEZIA - NAZARETH TRUCKING TERMINAL SITE INVESTIGATION LOWER NAZARETH TOWNSHIP, NORTHAMPTON COUNTY, PA EARTH DATA NE, INC. ACCUTEST LABORATORIES SDGs: JA38847, JA38981, and JA39099

This validation report presents the findings of a quality assurance review of the analytical data reported in the referenced sample delivery groups (SDGs). The soil, sediment, and aqueous samples and associated quality control (QC) samples were collected at the Venezia – Nazareth Trucking Terminal Site on 28 and 29 January 2010 and 1 and 2 February 2010 and submitted to Accutest Laboratories of Dayton, New Jersey. The sample specific analyses included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals. Analysis of the VOC and SVOC fractions included a mass spectral library search for additional non-target compounds which were reported as Tentatively Identified Compounds (TICs). The analyses were performed in accordance with the following protocols: Test Methods for Evaluating Solid Waste, United States Environmental Protection Agency (USEPA) SW-846, Third Edition, November 1986 and its updates. Specific method references are as follows:

<u>Analysis</u>	<u>Method References</u>
VOCs SVOCs PCBs Metals	USEPA SW-846 Method 8260B USEPA SW-846 Method 8270C USEPA SW-846 Method 8082 USEPA SW-846 Methods 6010B, 7470A, and 7471A

Validation of the organic compound data was performed in accordance with the USEPA Region III Innovative Approaches to Data Validation, June 1995, Level M1 and USEPA Region III Modifications to National Functional Guidelines for Organic Data Review Multi-Media, Multi-Concentration (1994). Validation of the inorganic data was performed in accordance with the USEPA Region III Innovative Approaches to Data Validation, June 1995, Level IM1 and USEPA Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses (1993).

The samples included in the referenced Accutest SDGs are as follows:

<u>Soil Samples</u>		
SB-2	SB-7	SB-12
SB-3	SB-8	SB-13
SB-4	SB-9	SB-14
SB-5	SB-10	SB-15
SB-6	SB-11	ŕ

Sediment Samples
MANHOLE 1 SED

MANHOLE 2 SED

<u>Aqueous Sample</u> WW TANK

QC Samples

TRIP BLANK - 01/29/10, TRIP BLANK - 02/02/10, and TRIP BLANK - 02/02/10 EQUIP BLANK 02/01/10 (Equipment Blank) MANHOLE 1 DUP-SED (Field Duplicate Sample)

ORGANIC DATA

The findings presented in this report are based on a USEPA Region III Level M1 review of the organic data for all samples. The review was based on an evaluation of the following criteria, reported according to the CLP-equivalent deliverables format: chain-of-custody documentation; holding times; laboratory, equipment, and trip blank analyses; the qualitative identification of target compounds; and field duplicate precision.

The organic analyses were performed acceptably, but require qualifying statements. It is recommended that the analytical results be used only with the qualifying statements presented in this report. Any aspects of the data that are not qualified in this review should be considered quantitatively and qualitatively valid as reported. Data summary tables presenting the validated and qualified results are presented in Attachment 1 of this report. The TIC concentrations for similar compound classes have been reported as a total concentration in these data tables.

ORGANIC DATA QUALIFIERS

- All compounds that were qualitatively identified at concentrations below their respective reporting limits have been marked with "J" qualifiers to indicate that they are quantitative estimates.
- All TIC results have been qualified "J" to indicate that they are estimated values.
 The TICs that were assigned with tentative chemical identifications have also been flagged "N".

Any TIC considered to be a laboratory artifact or contaminant has been negated. Any volatile compound initially reported as an SVOC TIC has been removed

- from the SVOC TIC summary. Similarly, any semivolatile compound initially reported as a VOC TIC has been removed from the VOC TIC summary.
- Soil samples SB-2, SB-3, SB-4, SB-5, SB-6, and SB-7 were analyzed for VOCs with initial dilutions due to high concentrations of target and non-target compounds. These dilutions yielded elevated detection limits for these samples, and the elevated "non-detect" detection limits for the referenced soil samples should be noted when assessing the VOC results for the project.
- The sample results summarized in the following table were reported from a diluted reanalysis. These dilutions were required because the concentrations of the referenced compounds were beyond the linear calibration range of the instrument with the initial analysis. Positive results for these compounds were reported from the diluted reanalysis. All other results and detection limits for these samples were reported from the initial analysis.

Compounds Reported from a Diluted Reanalysis	Sample/Analytical Fraction
bis(2-Ethylhexyl)phthalate, 2-Methylnaphthalene, and Naphthalene	SB-2 and SB-5/SVOC Fraction
Benzene, Chloroform, cis-1,2-Dichloroethene, 4-Methyl-2-pentanone, and Trichloroethene	SB-3/VOC Fraction
2-Methylnaphthalene and Naphthalene	SB-4/SVOC Fraction
2-Methylnaphthalene	SB-6/SVOC Fraction
Fluoranthene and Phenanthrene	SB-12/SVOC Fraction
bis(2-Ethylhexyl)phthalate	Manhole 1 Sed and Manhole 1 Dup-Sed/SVOC Fraction

Sample Manhole 1 Sed and its field duplicate sample, Manhole 1 Dup-Sed, were submitted to the laboratory to evaluate sampling and analytical precision for organic compounds. Field duplicate precision was assessed by comparison of the analytical results for these duplicate samples and calculation of the relative percent difference (RPD) between the positive analytical results. The field duplicate precision RPD criterion for all organic fractions was 40%. A control limit equal to 3X the reporting limit was used for field duplicate results at concentrations less than 5X the reporting limit.

The field duplicate precision objectives were met for all results reported for this duplicate pair, with the exception of the compounds presented in the following table. The poor precision observed for these compounds is attributed to the heterogeneity of the samples and/or instrument instability. The positive results for these compounds in samples Manhole 1 Sed and Manhole 1 Dup-Sed should be considered quantitative estimates and have been qualified "J" in the data tables.

Compounds Qualified for Field Duplicate Precision

INORGANIC DATA

The findings presented in this report are based on a USEPA Region III Level IM1 review of the inorganic data for all samples. The review was based on an evaluation of the following criteria, reported according to the CLP-equivalent deliverables format: chain-of-custody documentation; holding times; field duplicate precision; equipment blank results; and QC summary forms for laboratory calibration blanks, laboratory preparation blanks, initial and continuing calibration standards, low-level check standards, Inductively Coupled Plasma (ICP) interference check standards, matrix spike recoveries and reproducibility, and laboratory control sample results.

The inorganic analyses were performed acceptably, but require qualifying statements. It is recommended that the analytical results be used only with the qualifying statements presented in this report. Any aspects of the data that are not qualified in this review should be considered quantitatively and qualitatively valid as reported. Data summary tables presenting the validated and qualified results are presented in Attachment 1 of this report.

INORGANIC DATA QUALIFIERS

- All positive results for analytes reported at concentrations below their respective reporting limits have been marked with "J" qualifiers to indicate that they are quantitative estimates.
- The positive result reported for mercury in sample SB-4 is considered qualitatively invalid since this analyte was also detected in an associated blank at a similar concentration. Positive sample results for this analyte are considered qualitatively invalid when they are detected at concentrations less than five times the level detected in the associated blanks. The affected sample result has been qualified "B" to indicate that this detection is qualitatively invalid based on the results from the associated blanks.
- The "non-detect" detection limits reported for antimony in samples SB-15 and Manhole 2 Sed and mercury and thallium in sample WW Tank should be considered estimated and potentially biased low due to negative readings reported in associated laboratory calibration blanks. The "non-detect" detection limits for the referenced analytes have been qualified "UL" to indicate that they are biased low quantitative estimates. The possibility of elevated detection limits should be noted when assessing the "non-detect" results for the referenced analytes.
- The analytes summarized in the following table had low recoveries with associated low-level check standards. These low recoveries are an indication of a low bias with the measurement of these analytes at low concentrations. The positive results or "non-detect" detection limits for these analytes in the affected samples have been qualified "L" or "UL", respectively, to indicate that they are

biased low estimates. The possibility of elevated detection limits should be noted when assessing the "non-detect" values for the referenced sample results.

Analytes Qualified for Low-Level Check Standard Recoveries	Affected Samples
Selenium	SB-8, SB-9, SB-10, SB-11, and WW Tank
Lead	WW Tank

The "non-detect" detection limits for the analytes summarized in the following table were reported from a diluted reanalysis. These dilutions were required because of high concentrations of matrix interference with the initial analysis. These dilutions yielded elevated detection limits for these analytes, and these elevated "non-detect" detection limits should be noted when assessing the referenced sample results.

Analytes with Elevated Detection Limits	Affected Samples
Antimony, Cadmium, Selenium, Silver, and Thallium	SB-3 and SB-4
Silver and Thallium	SB-5
Antimony, Selenium, and Thallium	SB-8 and SB-10
Antimony, Cadmium, Selenium, and Thallium	SB-9 and SB-11
Thallium	SB-14 and Manhole 2 Sed
Selenium and Thallium	Manhole 1 Sed and
Selemum and mamum	Manhole 1 Dup-Sed

Sample Manhole 1 Sed and its field duplicate sample, Manhole 1 Dup-Sed, were submitted to the laboratory to evaluate sampling and analytical precision for metals. Field duplicate precision was assessed by comparison of the analytical results for these duplicate samples and calculation of the relative percent difference (RPD) between the positive analytical results. The field duplicate precision RPD criterion for all metals was 40%. A control limit equal to 3X the reporting limit was used for field duplicate results at concentrations less than 5X the reporting limit.

The field duplicate precision objectives were met for all results reported for this duplicate pair, with the exception of vanadium. The poor precision observed for vanadium is attributed to the heterogeneity of the samples and/or instrument instability, and the positive results for this analyte in samples SB-15, Manhole 1 Sed, Manhole 1 Dup-Sed, and Manhole 2 Sed were marked with "J" qualifiers on the data tables to indicate that they are quantitative estimates.

SUMMARY

In general, the analyses were performed acceptably, but required qualifying statements. This data validation report has identified the aspects of the analytical data that have required qualification. A support documentation package further detailing these findings has been prepared and is filed with the Venezia project file.

Joseph M. Loeper, Ph.D.

Senior Quality Assurance Chemist

<u>6 April 2010</u>

Dated

Attachment 1 Data Summary Tables

SAMPLE LOCATION:	SB-2		SB-3		SB-4		SB-5		SB-6	
DATE COLLECTED:	01/28/1	01/28/10		01/29/10		01/29/10)	01/29/10	
MATRIX:	Soil		Soil		Soil		Soil		Soil	
Volatile Organic Compounds (µg/Kg)				,						
Acetone	260	U	76.5		320	U	320	U	250	U
Benzene	1020		482		850		570/		38	U
Bromodichloromethane	30	U	0.27	U	37	U	37	U	29	U
Bromoform	18	U	0.16	U	22	U	22	U	17	U
Bromomethane	47	U	0.42	U	58	U	58	U	45	U
2-Butanone (MEK)	230	U	2.1	U	280	U	280	U	220	U
Carbon disulfide	36	U	5.4		65. <i>7</i>	J	44_	U	34	U
Carbon tetrachloride	65	U	0.58	U	79	U	1020		62	U
Chlorobenzene	242	J	17.5		152		64.1	J	74.9	J
Chloroethane	120	Ú	1.0	U	140	Ŭ	140	Ú	110	Ú
Chloroform	524	J	410	J	1150		2990	_	36	U
Chloromethane	19	Ŭ	0.17	U	24	U	24	U	19	U
Dibromochloromethane	13	U	0.11	U	16	U	16	U	12	U
1.1-Dichloroethane	16	U	0.60	J	20	U	20	U	16	U
1,2-Dichloroethane	41	U	0.36	Ŭ	49	U	49	U	39	U
1,1-Dichloroethene	78	U	6.4		94	U	94	U	74	U
cis-1,2-Dichloroethene	1050		14600/		1350		1970		· 738	
trans-1,2-Dichloroethene	53	U.	140		64	U	64	·U	50	บ
1,2-Dichloroethene (total)	1050		14700		1350	١	1970	J	738	Ü
1,2-Dichloropropane	15	U	0.14	บ	19	บ	19	U	15	U
cis-1,3-Dichloropropene	16	U	0.14	U	19	U	19	U	15	Ü
trans-1,3-Dichloropropene	11	บ	0.14	U	14	U	14	U	11	U
Ethylbenzene	230	١	11.4	U	281	U	232	U	154	U
2-Hexanone	110	U	1.0	U	140	U	140	U	110	บ
	95	U	175	J	187	J	120	U	91	U
4-Methyl-2-pentanone(MIBK)	233		28.8	,	32	U	32	U	25	U
Methylene chloride		J		7.7	1	_		_	ľ	
Styrene	116	IJ	0.11	U	15	U	15	U	12	U
1,1,2,2-Tetrachloroethane	34		0.31	U	42	U	42	_U	33	U
Tetrachloroethene	112	J	1.4	J	73.4	J	39.0	J	50.2	J
Toluene	666		22.4		536		106	J	33	U
1,1,1-Trichloroethane	15	U	0.13	U	18	U	18	U	14	U
1,1,2-Trichloroethane	22 5030	U	0.19	U	26	U	26	_U_	21	ับ
Trichloroethene	1	* * *	1800		2300	* 7	3270	***	4660	
Vinyl chloride	21	U	1.0	J	25	Ŭ	25	Ü	20	Ŭ
Xylene (total)	1470		114		2020		2060		753	
m - (-1 1-71 - 10-1										
Tentatively Identified										
Volatile Organic Compounds (μg/Kg)	-}									
Total Unknowns	70000	J			72000	J	17000	J	97000	J
Total Alkanes	53000	J			220000	J	28000	J	230000	J.
Total Substituted Aromatics	140000	J	88	J	250000	J	37000	J	82000	J
Dichlorofluoromethane			29	JN						
1,3,5-Trimethylbenzene			13	JN						
1,2,4-Trimethylbenzene			39	JN			6500	JN		

SAMPLE LOCATION:	SB-2		SB-3	,	SB-4		SB-5		SB-6	
DATE COLLECTED:	01/28/1	.0	01/29/1	10	01/29/1	.0	01/29/1	0	01/29/1	10
MATRIX:	Soil		Soil		Soil		Soil		Soil	
Semivolatile Organic Compounds (µg/Kg)										
2-Chlorophenol	35	U	35	U	35	U	34	U	34	U
4-Chloro-3-methyl phenol	34	U	35	U	35	U	34	U	34	U
2,4-Dichlorophenol	55	U	56	U	56	U	54	U	55	U
2,4-Dimethylphenol	58	U	59	U	58	U	57	U	57	U
2,4-Dinitrophenol	42	U	43	U	42	U	41	U	42	U
4,6-Dinitro-o-cresol	42	U	43	U	42	U	41	U	42	U
2-Methylphenol	39	U	40	U	39	U	38	Ų	39	U
3&4-Methylphenol	43	U	44	U	44	U	43	U	43	Ü
2-Nitrophenol	36	U	37	U	37	U	36	U	36	U
4-Nitrophenol	58	U	59	U	58	U	57	U	58	U
Pentachlorophenol	59	U	60	U	59	U	58	U	58	U
Phenol	36	U	37	U	36	U	35	U	36	U
2,4,5-Trichlorophenol	40	U	41	U	40	U	39	U	40	U
2,4,6-Trichlorophenol	32	U	33	U	33	U	32	U	32	U
Acenaphthene	9.9	U	10	U	10	U	392		9.9	U
Acenaphthylene	11	Ü	11	U	11	U	11	U	11	U
Anthracene	85.8		12	U	88.1		80.9		46.9	
Benzo(a)anthracene	51.3		11	U	56.6		66.8		20.9	J
Benzo(a)pyrene	31.1	J	11	U	33.9	J	26.9	J	10	U
Benzo(b)fluoranthene	47.2		12	U	49.5		45.2		11	U
Benzo(g,h,i)perylene	29.1	J	13	U	32.7	J	27.9	J	13	U
Benzo(k)fluoranthene	37.9		13	U	40.0		32.4	J	13	U
4-Bromophenyl phenyl ether	12	U	13	U	13	U	12	Ü	12	U
Butyl benzyl phthalate	53.2	J	20	U	47.4	Ţ	99.7		38.1	J
2-Chloronaphthalene	11	U	11	U	11	Ü	10	U	11	U
4-Chloroaniline	11	U	11	U	11	U	11	U	11	U
Carbazole	40.6	J	16	U	39.3	J	16	U	16	U
Chrysene	67.7		12	U	68.9		64.7		17.6	J
bis(2-Chloroethoxy)methane	14	U	14	U	14	U	14	U	14	U
bis(2-Chloroethyl)ether	10	U	11	U	10	U	10	U	10	U
bis(2-Chloroisopropyl)ether	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl phenyl ether	10	U	11	U	10	ט	10	U	10	U
1,2-Dichlorobenzene	72.0		10	U	10	U	9.7	U	43.8	J
1,3-Dichlorobenzene	9.2	U	9.4	U	9.3	U	9.0	U	9.1	U
1,4-Dichlorobenzene	7.6	U	7.8	U	7.7	U	<i>7</i> .5	U	7.6	U
2,4-Dinitrotoluene	15	U	15	U	15	U	15	U	15	U
2,6-Dinitrotoluene	13	U	13	U	13	U	13	U	13	U
3,3'-Dichlorobenzidine	8.7	U	8.9	U	8.8	U	8.5	U	8.7	U
Dibenzo(a,h)anthracene	12	U	12	U	12	U	11	U	12	U
Dibenzofuran	365		10	U	467		749		149	

SAMPLE LOCATION:	SB-2		SB-3	,	SB-4		SB-5		SB-6	
DATE COLLECTED:	01/28/1	0	01/29/1	lo	01/29/1	0	01/29/1	0	01/29/1	10
MATRIX:	Soil		Soil		Soil		Soil		Soil	
Semivolatile Organic Compounds (µg/Kg)										
(continued)										
Di-n-butyl phthalate	94.9		7.8	U	61.7	J	89.9		35.7	J
Di-n-octyl phthalate	17	U	17	U	68.3	J	16	Ŭ	17	U
Diethyl phthalate	12	U	12	U	12	U	11	U	12	Ü
Dimethyl phthalate	12	_ U	12	U	12	U	12	U	12	U
bis(2-Ethylhexyl)phthalate	4830		31	U	3280	l	6690		1560	
Fluoranthene	260		15	U	257		332		77.7	
Fluorene	571		11	U	630		889		245	
Hexachlorobenzene	11	U	11	U	11	U	11	U	11	U
Hexachlorobutadiene	9.5	U	9.7	U	9.6	U	9.4	U	9.5	U
Hexachlorocyclopentadiene	35	U	36	U	35	U	34	U	35	U
Hexachloroethane	9.5	U	9.7	U	9.6	U	9.4	U	9.5	U
Indeno(1,2,3-cd)pyrene	24.1	J	12	U	28.2	J	23.1	J	12	U
Isophorone	9.2	U	9.4	U	9.3	U	9.1	Ū	9.2	U
2-Methylnaphthalene	25800	- 1	46.3	J	33900		44000		6260	
2-Nitroaniline	15	U	15	U	15	U	15	U	15	U
3-Nitroaniline	14	U	14	U	14	U	13	U	14	U
4-Nitroaniline	13	U	14	U	13	U	13	U	13	U
Naphthalene	7480	- 1	43.0	J	10700		13300		986	
Nitrobenzene	9.9	U	10	U	10	บ	9.7	U	9.9	U
N-Nitroso-di-n-propylamine	8.4	U	8.5	U	8.4	U	8.2	U	8.3	U
N-Nitrosodiphenylamine	20	Ū·	21	U	21	U	20	U	20	U
Phenanthrene	695	l	16	U	717		1140	- 1	327	
Pyrene	195	- 1	13	U	208		240		64.6	
1,2,4-Trichlorobenzene	9.1	U	9.3	U	9.2	U	9.0	U	9.1	U
Tentatively Identified										
Semivolatile Organic Compounds (µg/Kg)										
Total Unknowns	4900	J	300	J	7100	J	5800	J	3500	J
Total Alkanes	43000	Ĵ		1	290000	Ĵ	68000	Ĵ	39000	J
Total Substituted PAH	14000	J		- 1	19000	j	16000	Ţ	11000	j
Total Substituted Phenols	11000	j				ĺ				,
Total Alkenes					13000	J	6700	ī	1500	
Total Organic Acids		- 1		- 1						,
Total Cycloalkanes										
1-Methyl naphthalene										
Cyclic octaatomic sulfur										
Dibenzothiophene										
9,10-Anthracenedione										
,										

SAMPLE LOCATION:	SB-2	SB-2			SB-4		SB-5		SB-6	,
DATE COLLECTED:	01/28/1	01/28/10		01/29/10		01/29/10		01/29/10		10
MATRIX:	Soil		Soil		Soil		Soil		Soil	
Polychlorinated Biphenyls (µg/Kg)]									
Aroclor 1016	13	U	13	U	13	U	12	U	12	U
Aroclor 1221	23	U	24	U	23	U	23	U	23	U
Aroclor 1232	11	U	12	U	11	U	11	U	11	U
Aroclor 1242	13	U	13	U	13	U	12	U	13	U
Aroclor 1248	7.0	U	7.2	U	7.0	U	6.8	Ū	6.9	U
Aroclor 1254	8.9	U	9.1	U	44.7		8.7	U	8.8	U
Aroclor 1260	14	U	14	U	14	U	13	U	14	U
Total Metals (mg/Kg)										
Aluminum	20500		15700		15000		14200		15100	
Antimony	2.3	U	4.9	U	4.7	บ	2.5	U	2.5	U
Arsenic	8.6		34.6		24.5		26.2		10.3	
Barium	55.7		124		113		50.3		65.4	
Beryllium	0.84		1.2		0.92		3.5		1.1	
Cadmium	0.58	U	1.2	U	1.2	υ	0.62	U	0.63	U
Calcium	1210		610 ·	U	3590		620	U	<i>7</i> 81	
Chromium	16.7		16.8		21.7		14.9		9.2	
Cobalt	12.2		33.1		62.7		55.7		23.7	
Copper	32.2		35.3		37.0		27.9		29.4	
Iron	36900		81800		80800		64300		35000	
Lead	18.8		17.9		16.5		17.6		14.5	
Magnesium	1040		610	U	584		620	U	644	
Manganese	336		1990		2870		604		814	
Mercury	0.037	U	0.12		0.038	В	0.038	U	0.036	U
Nickel	24.3		37.8		53.6		103		34.0	
Potassium	1200	Ū	1200	U	1200	Ü	1200	U	1300	U
Selenium	2.3	U	4.9	U	4.7	U	2.5	U	2.5	U
Silver	0.58	U	1.2	บ	1.2	U	1.2	U	0.63	U
Sodium	1200	U	1200	U	1200	U	1200	U	1300	U
Thallium	1.2	U	2.4	U	2.3	U	2.5	U	1.3	U
Vanadium	20.9		17.2		13.1		16.5		11.5	
Zinc	61.0		85.9		86.6		435		79.0	

Qualifier Codes:

- U This compound/analyte was not detected. The numerical value reported represents the sample detection limit for the compound/analyte.
- B This result is qualitatively invalid because the compound/analyte was also detected in a blank at a similar concentration.
- J This result should be considered a quantitative estimate.
- L This positive result or detection limit should be considered a biased low quantitative estimate.
- N The mass spectrum indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

The state of the s	
deple :	Value
rget cancer risk (TR) - unitless	1.0E-6
rget hazard quotient (THQ) - unitless	1
reraging time (AT) - days	365
posure frequency (EF) - days	250
posure duration (ED) - years	25
e Time (LT)	70
posure Time (ET)	8
lult body weight (BW _w) - kg	70
orker soil ingestion rate (IR _w) - mg/day	100
posed skin surface (SA _w) - cm²/day	3300
il-to-skin adherence factor (AF _w) - mg/cm ²	0.2

orker Risk-Based Screening Levels for Soil =Cancer, nc=Noncancer, ca* (Where nc SL < 100 x ca SL),

*** (Where nc SL < 10 x ca SL),

1x=SL exceeds ceiling limit (see User's Guide), sat=SL exceeds csat

Chemical.	CAS	Ingestion SF (mg/kg-day) ⁻¹	SFO	Inhalation Unit Risk (ug/m³) ⁻¹	IUR	TEST OF THE LEW AND THE POST OF A COMME	RfD Ref	Production and Production of the Production of t	RfC	CAL TO SEE THE PARTY OF		Volatilization Factor (m³/kg)	Soil Saturation Concentration (mg/kg)
enzene	71-43-2	5.50E-02		7.80E-06		4.00E-03		3.00E-02		1		9.02E+03	1.65E+03
arbon Tetrachloride	56-23-5	7.00E-02	I	6.00E-06		4.00E-03	ı	1.00E-01		1	-	3.93E+03	4.39E+02
chloroethylene, 1,2-cis-	156-59-2					2.00E-03			74.8 74.8			6.96E+03	2.55E+03
ichloroethylene	79-01-6	5.90E-03	C	2.00E-06	С	-		-		1	-	5.89E+03	6.82E+02

Chemical	Particulate Emission Factor (m³/kg)	SL	SL	SL TR=1.0E-6	SL TR=1.0E-6	SL HQ=1	SL HQ=1	Inhalation SL HQ=1 (mg/kg)	Noncarcinogenic SL HI=1 (mg/kg)	Screening Level (mg/kg)
nzene	1.27E+09	5.20E+01		1.42E+01	1.11E+01	4:09E+03		1.19E+03	9.19E+02	1.11E+01 ca*
irbon Tetrachloride	1.27E+09	4.09E+01	-	8.03E+00	6.71E+00	4.09E+03	-	1.72E+03	1.21E+03	6.71E+00 ca
chloroethylene, 1,2-cis-	1.27E+09					2.04E+03		40477	2.04E+03	2.04E+03 nc
chloroethylene	1.27E+09	4.85E+02	-	3.61E+01	3.36E+01	-	-	-	-	3.36E+01 ca**

quation Inputs for Soil to Groundwater

ariable	∘ Value -
arget cancer risk (TR) - unitless	1.0E-6
arget hazard quotient (THQ) - unitless	1
veraging time (AT) - days	365
kposure frequency (EF) - days	350
cposure duration (ED) - years	30
utagenic Exposure duration (ED ₀₋₂) - years	2
utagenic Exposure duration (ED ₂₋₆) - years	4
utagenic Exposure duration (ED ₆₋₁₆) - years	10
utagenic Exposure duration (ED ₁₆₋₃₀) - years	14
fe Time (LT)	70
cposure Time (ET) hours/day	24
ody Weight - adult (BW _a) - kg	70
ody Weight - children 1-6 yr (BW _c) - kg	15
posure duration - child (ED _c) - years	6
ater Ingestion - adult (IRW _a) - L/day	2
ater Ingestion - child (IRW _c) - L/day	1
ılatilization factor of Andelman (K) - L/m³	0.5
gestion Factor - L-year/kg-day	1.0857142857
ıtagenic Ingestion Factor - L-year/kg-day	3.3904761905
ution factor (unitless)	1
pth of source (d _s) - m	
uifer thickness (d _a) - m	
source length parallel to ground water flow) m	
nfiltration Rate) m/yr	0.18
ydraulic gradient) m/m	
aquifer hydraulic conductivity) m/yr	
il particle density (kg/L)	2.65
y soil bulk density (kg/L)	1.5
ater-filled soil porosity (L _{water} /L _{soil})	0.3
action organic carbon in soil (unitless)	0.002

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sk-Based Screening Levels for Soil to Groundwater =Cancer, nc=Noncancer, ca* (Where nc SL < 100 x ca SL),

** (Where nc SL < 10 x ca SL),

x=SL exceeds ceiling limit (see User's Guide), sat=SL exceeds csat

Chemical	CAS Number		SFO	Unit Risk	IUR		RfD Ref	Land Company of the C	RfC	K _d
nzene	71-43-2	5.50E-02		7.80E-06		4.00E-03		3.00E-02		0.2916
arbon Tetrachloride	56-23-5	7.00E-02	-	6.00E-06	1	4.00E-03	i	1.00E-01	ı	0.08778
chloroethylene, 1,2-cis-	156-59-2					2.00E-03				0.0792
chloroethylene	79-01-6	5.90E-03	C	2.00E-06	C	-		-		0.1214

Chemical	K _{oc}	The first of a second by the profile	Risk-Based Water Concentration (ug/L)	MCL-Based Water Concentration (ug/L)	Screening	Risk-Based Screening Level (mg/kg)
nzene	145.8	0.2269011	4.13E-01	5.00E+00	2.56E-03	2.11E-04
rbon Tetrachloride	43.89	1.1283729	4.40E-01	5.00E+00	1.94E-03	1.71E-04
:hloroethylene, 1,2-cis-	39.6	0.1668029	7.30E+01	7:00E+01	2.06E-02	2.15E-02
chloroethylene	60.7	0.4026983	2.01E+00	5.00E+00	1.79E-03	7.17E-04

Environmental Covenant

When recorded, return to: Edward B. Kern, *Chief Financial Officer*, Venezia, Inc. P.O. Box 909, Royersford, PA 19468.

The County Parcel Identification No. of the Property is: K7-18-14

GRANTOR: Venezia Enterprises

PROPERTY ADDRESS: 3987 Easton-Nazareth Highway/Route 248

Nazareth, PA 18064

ENVIRONMENTAL COVENANT

This Environmental Covenant is executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 – 6517 ("UECA"). This Environmental Covenant subjects the Property identified in Paragraph 1 to the activity and/or use limitations in this document. As indicated later in this document, this Environmental Covenant has been approved by the Pennsylvania Department of Environmental Protection ("Department").

1. <u>Property affected</u>. The property affected ("Property") by this Environmental Covenant is located in Lower Nazareth Township, Northampton County.

The postal street address of the Property [if any] is: 3987 Easton-Nazareth Highway. The latitude and longitude of the center of the Property affected by this Environmental Covenant is: Lat: 40.728913, Long: -75.305412.

The Property has been known by the following name(s): Chemical Leaman Tank Lines, Inc., Quality Carriers, Inc.

[For registered tanks, the PADEP Tank Facility ID# is: 48-06637 [For other facilities, the DEP Primary Facility ID# is/are: unknown

A complete description of the Property is attached to this Environmental Covenant as Exhibit A. A map of the Property is attached to this Environmental Covenant as Exhibit B.

- 2. **Property Owner / GRANTOR / GRANTEE**. Venezia Enterprises is/are the owner(s) of the Property and the GRANTOR and GRANTEE of this Environmental Covenant.
- 3. The mailing address(es) of the owner(s) is/are: P.O. Box 909, Royersford, PA 19468.

- 4. **Description of Contamination & Remedy.** Reportedly, during the Chemical Leaman Tank Lines, Inc. ownership, site operations included the cleaning of the interiors of tankers and trucks. This activity began in December 1965 and ceased mid-1979. Wastewater generated by the operation, allegedly containing petroleum oils, acids, synthetic latexes, and acrylates, was contained in two, unlined lagoons located near the center of the site. Subsequent soil sampling, performed in and around the former lagoon area during a Soil Investigation completed in February 2010, indicated that four (4) Volatile Organic Compounds ("VOCs") were detected within the subsurface soil intervals (ranging from 9 to 20 feet below ground surface) that exceeded the Pennsylvania Department of Environmental Protection ("PADEP") Land Recycling and Remediation Standards Act ("Act 2") Statewide Health Standard ("SHS") Medium Specific Concentrations ("MSCs") for a non-residential (and residential), used aquifer. Those compounds included: Benzene, Carbon Tetrachloride, Trichloroethene ("TCE"), and cis-1,2-Dichloroethene ("DCE"). Site-specific soil properties and contaminant fate and transport considerations were then used as part of a Remedial Investigation which concluded that the impacted subsurface soils found in the vicinity of the former lagoon area had attained the Act 2 Site-Specific Standard ("SSS") through pathway elimination. Soil to Groundwater screening levels, however, suggested that a potential risk to localized groundwater existed. To ensure that the groundwater exposure pathway remains incomplete, Venezia Enterprises will implement the groundwater use limitation provided within this Environmental Covenant, in Paragraph 5, below. The investigation mentioned above is documented in the report entitled Act 2 Remedial Investigation Report/Final Report, prepared by Earth Data Northeast, Inc. and dated March 2011.
- 5. <u>Activity & Use Limitations</u>. The Property is subject to the following activity and use limitations, which the then current owner of the Property, and its tenants, agents, employees and other persons under its control, shall abide by:
 - Use of onsite groundwater for potable purposes is prohibited.
- 6. <u>Notice of Limitations in Future Conveyances</u>. Each instrument hereafter conveying any interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.
- 7. <u>Compliance Reporting</u>. After written request by the Department, the then current owner of the Property shall submit, to the Department and any Holder listed in Paragraph 2, written documentation stating whether or not the activity and use limitations in this Environmental Covenant are being abided by. In addition, within 1 month after any of the following events, the then current owner of the Property shall submit, to the Department and any Holder listed in Paragraph 2, written documentation: noncompliance with the activity and use limitations in this Environmental Covenant; transfer of the Property.
- 8. Access by the Department. In addition to any rights already possessed by the Department, this Environmental Covenant grants to the Department a right of

reasonable access of the Property in connection with implementation or enforcement of this Environmental Covenant.

- 9. Recording & Proof & Notification. Within 30 days after the date of the Department's approval of this Environmental Covenant, Venezia Enterprises shall file this Environmental Covenant with the Recorder of Deeds for each County in which the Property is located, and send a file-stamped copy of this Environmental Covenant to the Department within 60 days of recording. Within that time period, Venezia Enterprises also shall send a file-stamped copy to each of the following: Lower Nazareth Township and Northampton County; any Holder identified in this Environmental Covenant listed in Paragraph 2; each person holding a recorded interest in the Property; each person in possession of the Property; and any other persons as required by the Department.
- 10. **Termination or Modification**. This Environmental Covenant may only be terminated or modified in accordance with Section 9 of UECA, 27 Pa. C.S. § 6509, including as follows:

This Environmental Covenant shall terminate upon attainment, in accordance with 35 P.S. §§ 6026. 101 – 6026.908, with an unrestricted use remediation standard for the above-described contamination at the Property. The Department must approve, in writing, of such termination.

11. **Department's address**. Communications with the Department regarding this Environmental Covenant shall be sent to:

Gerard F. Olenick, P.G.
Licensed Professional Geologist, Special Projects Section
Pennsylvania Department of Environmental Protection
Environmental Cleanup Program
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915

ACKNOWLEDGMENTS by Owner(s) and any Holder(s), in the following form:

	Venezia Enterprises, Grantor
Date:	
	By:
	Name: Edward B. Kern
	Title: Chief Financial Officer, Venezia, Inc.
Date:	Venezia Enterprises, Grantee
	By:
	Name: Edward B. Kern
	Title: Chief Financial Officer, Venezia, Inc.

[REPEAT AS NECESSARY]

APPROVED, by Commonwealth of Pennsylvania,
Department of Environmental Protection
By:

By: ______Name: _____

Title:

COMMONWEALTH OF PENNSYLVANIA)[other state, if executed outside PA]
COUNTY OF) SS:
On this day of, personally appeared v person whose name is subscribed to this Envir that s/he executed same for the purposes there	conmental Covenant, and acknowledged
In witness where	eof, I hereunto set my hand and official seal.
	Notary Public
COMMONWEALTH OF PENNSYLVANIA COUNTY OF)[other state, if executed outside PA])) SS:
personally appearedv person whose name is subscribed to this Envir that s/he executed same for the purposes there	ronmental Covenant, and acknowledged
	Notary Public
[REPEAT AS NECESSARY]	
COMMONWEALTH OF PENNSYLVANIA COUNTY OF))) SS:
On this day of, who ack personally appeared, who ack [Title] of the Commonwealth Environmental Protection, [name is subscribed to this Environmental Coverage for the purposes therein contained.	th of Pennsylvania, Department of insert name of regional office], whose
In witness where	eof, I hereunto set my hand and official seal.
	Notary Public

EXHIBIT A

ALL THAT CERTAIN TRACT OR PIECE OF LAND SITUATE IN THE TOWNSHIP OF LOWER NAZARETH, COUNTY OF NORTHAMPTON, AND STATE OF PENNSYLVANIA, BOUNDED AND DESCRIBED MORE FULLY AS FOLLOWS, TO WIT:

BEGINNING AT A POINT IN THE CENTER LINE OF THE RECONSTRUCTED HIGHWAY BETWEEN EASTON, PENNSYLVANIA AND NAZARETH,

PENNSYLVANIA, (PENNA, STATE HIGHWAY ROUTE NO. 45); SAID POINT BEING THE INTERSECTION OF THE PROPERTY LINE BETWEEN LANDS OF JOHN A. MILLER. SR. AND ANDREW S. PRANCZAK AND STATION 353 + 19.51 AS SHOWN ON PENNA. STATE HIGHWAY MAP: THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID HIGHWAY, SOUTH 36 DEGREES 57 MINUTES EAST 421.8 FEET TO A POINT AT STATION 348 + 97.71: THENCE SOUTHWESTERLY THRU PRESENT LANDS OF ANDREW S. FRANCZAK SOUTH 14 DEGREES 58 MINUTES WEST 1144.74 FEET TO A POINT AND CORNER IN THE CENTER OF A SMALL STREAM RUNNING THRU LANDS OF ANDREW S. PRANCZAK: THENCE THE FOLLOWING COURSES AND DISTANCES ALONG THE CENTER OF SAID SMALL STREAM (1) SOUTH 83 DEGREES 43 MINUTES WEST 19:33 FEET TO A CORNER (2) SOUTH 88 DEGREES 16 MINUTES WEST 52.2 FEET TO A CORNER (3) NORTH 81 DEGREES 53 MINUTES WEST 50.36 FEET TO A CORNER (4) NORTH 85 DEGREES 14 MINUTES WEST 50.8 FEET TO A CORNER (5) SOUTH 88 DEGREES 16 MINUTES WEST 52.2 FEET TO A CORNER (6) SOUTH 85 DEGREES 10 MINUTES WEST 53.14 FEET TO A CORNER (7) SOUTH 86 DEGREES 54 MINUTES WEST 44.25 FEET TO A CORNER IN LINE OF LANDS OF HARVEY N. GRUBE; THENCE NORTHWESTERLY ALONG LANDS OF HARVEY N. GRUBE NORTH 2 DEGREES 02 MINUTES WEST 75.0 FEET TO A CORNER IN LANDS OF JOHN A. MILLER. SR.: THENCE NORTHEASTERLY ALONG LANDS OF JOHN A. MILLER NORTH 14 DEGREES 58 MINUTES EAST, 1416.9 FEET TO A POINT IN THE CENTER LINE OF THE RECONSTRUCTED HIGHWAY BETWEEN EASTON, PENNSYLVANIA AND NAZARETH, PENNSYLVANIA (PENNA. STATE HIGHWAY ROUTE NO. 45). AT STATION 353 + 19.51, THE PLACE OF BEGINNING.

CONTAINING 10.034 ACRES, MORE OR LESS.

BOUNDED ON THE NORTH BY PENNA. STATE HIGHWAY ROUTE NO. 45; ON THE EAST BY LANDS OF ANDREW S. AND KATHERINE PRANCZAK; AND ON THE SOUTH BY OTHER LANDS OF ANDREW S. AND KATHERINE PRANCZAK; AND ON THE WEST BY LANDS OF HARVEY N. GRUBE AND WIFE AND JOHN A. MILLER, SR. AND MARY MILLER.

EXCEPTING THEREOUT AND THEREFROM THE FOLLOWING:

- ALL THAT CERTAIN TWENTY (20.00) FEET WIDE SANITARY SEWER RIGHT-OF-WAY SITUATE IN LOWER NAZARETH TOWNSHIP; NORTHAMPTON COUNTY, PENNSYLVANIA, THE CENTERLINE OF WHICH IS DESCRIBED AS FOLLOWS, TO WIT:
- BEGINNING AT A POINT ON THE EASTERLY PROPERTY LINE OF LAND OF THE GRANTOR AND WESTERLY PROPERTY LINES OF LAND OF COPLAY CEMENT COMPANY SAID POINT IS LOCATED NORTH FOURTEEN DEGREES FORTY NINE MINUTES, ZERO SECONDS, EAST FORTY-ONE AND SIXTY-EIGHT ONE-HUNDREDTHS FEET (NORTH 14 DEGREES 49 MINUTES 00 SECONDS EAST 41.68) FROM THE SOUTHEASTERLY PROPERTY CORNER OF LAND OF THE GRANTOR AND A WESTERLY CORNER OF COPLAY CEMENT CO.; THENCE THROUGH LAND OF THE GRANTOR THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) SOUTH EIGHTY-SIX DEGREES ZERO MINUTES TWELVE SECONDS WEST EIGHTY-FOUR AND NINETY-TWO ONE-HUNDREDTHS FEET TO A POINT, (2) NORTH EIGHTY-NINE DEGREES, NINETEEN MINUTES ZERO SECONDS WEST TWO HUNDRED FORTY-EIGHT AND FIFTY-ONE ONE-HUNDREDTHS FEET TO A POINT ON THE WESTERLY PROPERTY LINE OF LAND OF THE GRANTOR AND THE EASTERLY PROPERTY LINE OF LAND OF WILLARD E. AND GRACE M. SETZER.

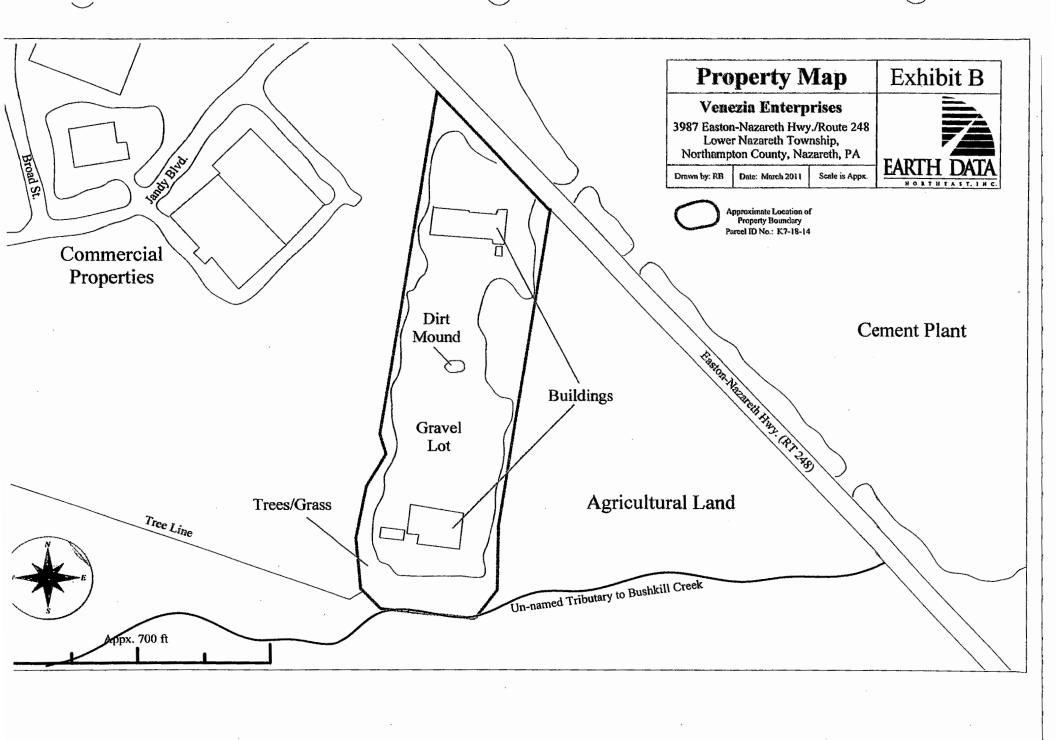
CONTAINING SIX THOUSAND SIX HUNDRED SIXTY-NINE (6,669) SQUARE FEET.

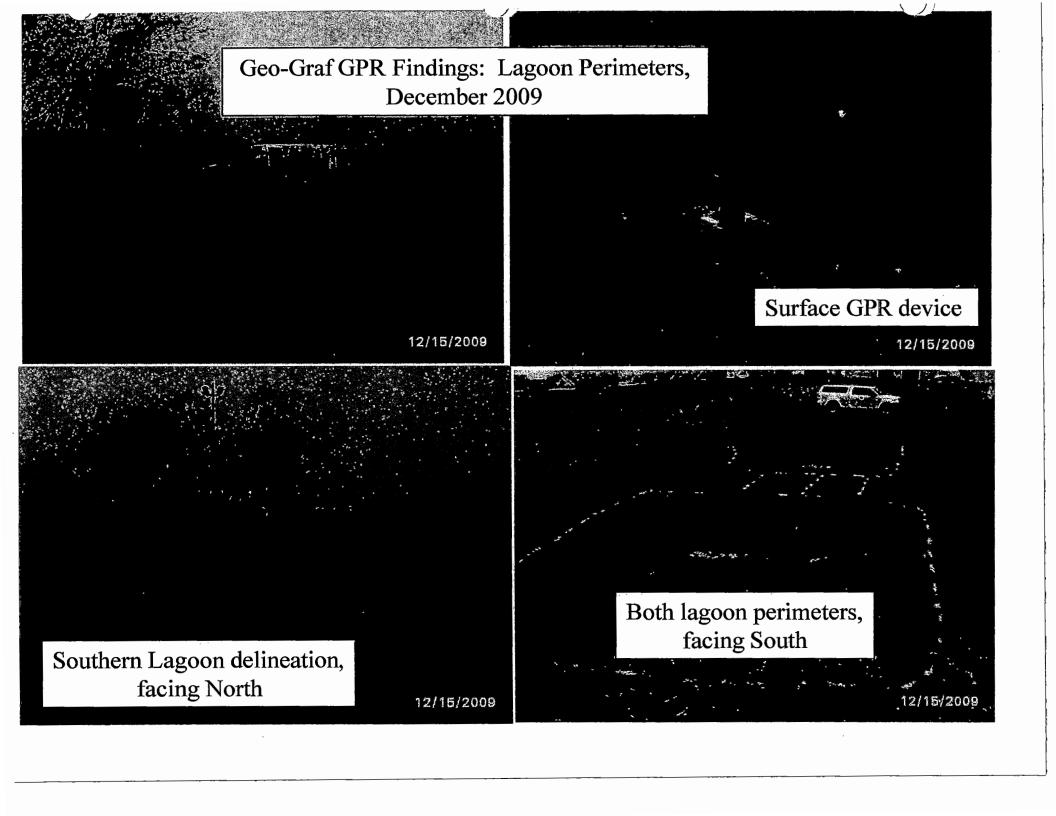
BEING ALL AS SHOWN ON A PLAN TITLED "NAZARETH BOROUGH MUNICIPAL AUTHORITY - SANITARY SEWER RIGHT-OF-WAY - N & R TRUCK CO., INC." PLAN NO. P-2910-4, DATED APRIL, 1987, AS PREPARED BY F & M ASSOCIATES, INC., CONSULTING CIVIL ENGINEERS, ALLENTOWN, PA.

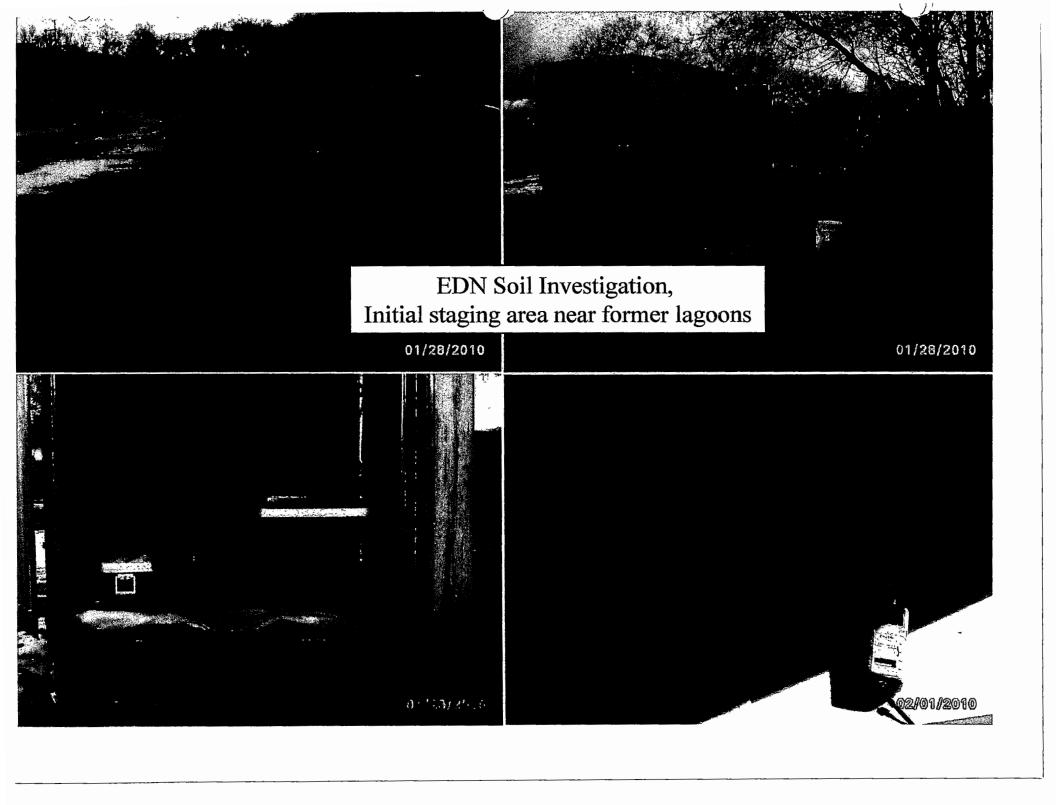
ALSO EXCEPTING THEREOUT AND THEREFROM A PORTION OF PROPERTY CONSISTING OF 0.031 ACRES AND 0.014 ACRES OF LAND FOR WIDENING OF PENNA. STATE HIGHWAY ROUTE 248 AND TEMPORARY CONSTRUCTION EASEMENT AS AS SET FORTH IN DEED BOOK 2004-1 PG. 112381.

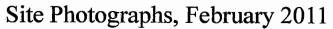
BEING THE SAME PREMISES WHICH CHEMICAL TANK LINE, INC., A DELAWARE CORPORATION, BY DEED DATED 8-15-1960 AND RECORDED 12-28-1961 IN THE COUNTY OF NORTHAMPTON IN DEED BOOK VOL. 163 PAGE 103, CONVEYED UNTO N & TRUCK CO., INC., A PENNA. CORPORATION, T/A CHEMICAL LEASING CORPORATION, IN FEE. AND THE SAID N & R TRUCK CO., INC. MERGED WITH CHEMICAL LEASING CORPORATION TO FORM CHEMICAL PROPERTIES, INC. AND THE SAID CHEMICAL PROPERTIES, INC. BY ARTICLES OF MERGER DATED 12/30/2002 IN THE COMMONWEALTH OF PENNSYLVANIA, ENTITY NO. 662639 MERGED WITH QUALITY CARRIERS, INC., AND IS NOW KNOWN AS QUALITY CARRIERS, INC.

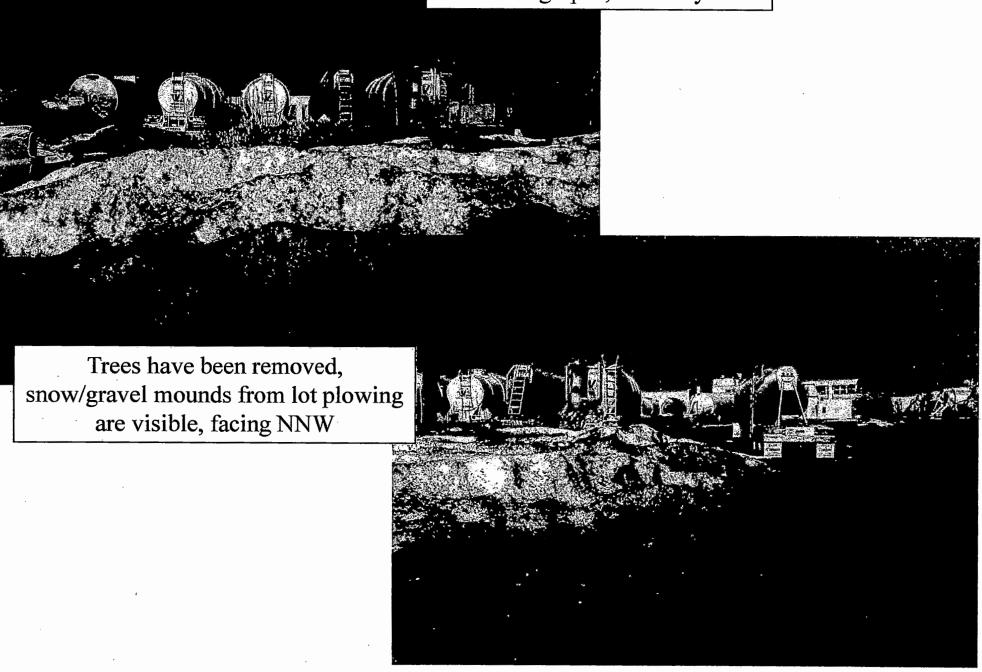
BEING COUNTY PARCEL NO. K7-18-14.













Groundwater and Environmental Consultants

February 28, 2011

Lower Nazareth Township Municipal Office 306 Butztown Road Bethlehem, PA 18020

Subject:

Notice of Final Report Submission

Venezia Hauling, Inc.

Lower Nazareth Township, Northampton County, Pennsylvania

Dear Municipal Official,

The Land Recycling and Environmental Remediation Standards Act ("Act-2") of May 19, 1995, P.L. 4, No. 1995-2, requires that a Notice of a Plan or Report submission be provided to the municipality in which a subject site is located. In accordance with this provision of Act-2, formal notice is hereby given that Venezia Hauling, Inc. ("Venezia") is submitting a Combined Remedial Investigation Report/Final Report to the Pennsylvania Department of Environmental Protection's Northeast Regional Office for the site listed above. The Report indicates that Venezia has attained compliance with the Site-Specific Cleanup Standard ("SSS") through the elimination of all exposure pathways.

This notice will also be published in the <u>Pennsylvania Bulletin</u>, and a summary of the notice will be placed in *The Morning Call* newspaper on Thursday, March 3, 2011.

If you have any questions or comments regarding this notice, please contact me at (610) 524-9466, or via email at <u>rbeebeaearthdatane.com</u>.

Sincerely,

Ryan B. Beebe

Environmental Scientist / Project Manager

Earth Data Northeast, Inc.

U	NITED	STATES	POSTAL	SERVICE
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First-Class Mail Postage & Fees Paid USPS Permit No. G-10

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EYAN B. BEEBE EARTH DATA NORTHEAST 924 SPRINGDALE DRIVE EXTUN PA 19341

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PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

Proof of Publication Notice in The Morning Call

Under Act No. 587, Approved May 16, 1929, and its amendments

OUNTY OF LEHIGH SS:	COPY OF NOTICE OR ADVERTISEMENT
enn Adams, Credit Manager of THE RNING CALL, INC., of the County and State aforesaid, being duly sworn, oses and says that THE MORNING CALL is a newspaper of general ulation as defined by the aforesaid Act, whose place of business is 101 North h Street, City of Allentown, County and State aforesaid, and that the said spaper was established in 1888 since which date THE MORNING CALL has a regulariy issued in said County, and that the printed notice or advertisement shed hereto is exactly the same as was printed and published in regular ions and issues of the said THE MORNING CALL on the following dates, viz.:	NOTICE OF FINAL REPORT SUBMISSION Venezia Hauling, Inc. Lower Nazareth Township, Northampton County, PA
and the 3rd day of March 2011 .ffiant further deposes that he is the designated agent duly authorized by THE RNING CALL, INC., a corporation, publisher of said THE MORNING L, a newspaper of general circulation, to verify the foregoing statement under and the affiant is not interested in the subject matter of the aforesaid notice livertisement, and that all allegations in the foregoing statements as to time, and character of publication are true. Designated Agent, THE MORNING CALL, INC. DRN to and subscribed before me this 3rd day of	Northampton County, PA Pursuant to the Land Recycling and Environmental Remediation Standards Act of May 19, 1995, P.L. 4, No. 1995-2 ('Act-2'), notice is hereby given that Venezia Hauling, Inc. ('Venezia') is submitting a combined Remedial Investigation Report/Final Report (RIR/FR) to the Pennsylvania Department of Environmental Protection's Northeast Regional Office, to demonstrate attainment of the Site-Specific Standard ('SSS') for a site located at 3987 Easton-Nazareth Highway (Route 248) in Lower Nazareth Township, Northampton County, Pennsylvania. Venezia has indicated that the SSS, established under Act-2, has been attained through the elimination of all exposure pathways. #35548 — 3/3
March 2011 Notary Public Notarial Seal Joanne Reiss, Notary Public City of Allentown, Lehigh County My Commission Expires Nov. 2:	
ember, Pennsylvania Association of Notation	
	THE MORNING CALL, INC. a Corporation,

Publishers of THE MORNING CALL A Newspaper of General Circulation

)#32424



Groundwater and Environmental Consultants

January 6, 2011

Lower Nazareth Township Municipal Office 306 Butztown Road Bethlehem, PA 18020

Subject:

Notice of Intent to Remediate

Venezia Hauling, Inc.

Lower Nazareth Township, Northampton County, Pennsylvania

Dear Municipal Official.

The Land Recycling and Environmental Remediation Standards Act ("Act-2") of May 19, 1995. P.L. 4. No. 1995-2, requires that a Notice of Intent to Remediate ("NIR") be provided to the municipality in which a subject site is located. In accordance with this provision of Act-2, formal notice is hereby given, on behalf of Venezia Hauling, Inc., of its intent to attain compliance with a Site Specific Standard ("SSS") for a portion of the site listed above. A copy of the NIR, which will be submitted to the Pennsylvania Department of Environmental Protection ("PADEP"), is enclosed. This notice will also be published in the Pennsylvania Bulletin, and a summary of the notice will be placed in *The Morning Call* newspaper on Monday, January 10, 2011.

Act-2 also provides that when a site is being remediated to a SSS, the municipality is afforded a 30-day comment period. Publication of this notice in *The Morning Call* initiates the 30-day public and municipal comment period. During this time, your municipality may request to become involved in the development of the remediation and reuse plans for the site. If the municipality wishes to become involved in this project, please send your comments to my attention via email; rbeebe@earthdatane.com, phone; (610) 524-9466, or office address; 924 Springdale Drive, Exton, Pennsylvania 19341.

Sincerely,

Ryan B. Beebe

Environmental Scientist / Project Manager

15 July

Earth Data Northeast, Inc.

Enclosure

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature Agent Addressee B. Received by (Printed Name) C. Date, of Delivery
Article Addressed to:	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
Nunicipal Olice 306 Butztown Road	
200 R. t. t Road	
Bethlehem, PA 18020	3. Service Type ☐ Certified Mail ☐ Express Mail ☐ Registered ☐ Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.
	4. Restricted Delivery? (Extra Fee)
2. Article Numbi (Transfer from 7010 0290 0002 0	109 5802 PO4 5802
PS Form 3811, February 2004 Domestic Retu	ırn Receipt 102595-02-M-1540
United States Postal Service	First-Class Mail Postage & Fees Paid USPS Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Ryan Beebe.

Earth Data Northeast

924 Spring dale Drive.

Extori, PA 19341

Proof of Publication Notice in The Morning Call

Under Act No. 587, Approved May 16, 1929, and its amendments

	STATE OF PENNSYLVANIA	COPY OF NOTICE OR ADVERTIS	SEMENT
	COUNTY OF LEHIGH SS:		"
		NOTICE OF INTENT TO REMEDIATE Venezia Hauling, Inc.	
	Glenn Adams, Credit Manager of THE	Venezia Hauling, Inc. Lower Nazareth Township, Northampton County, PA Pursuant to the Land Recycling and Environmental Remediation Standards Act of Nav. 10	
	Glenn Adams, Credit Manager 66 The	Pursuant to the Land Recycling	,
	MORNING CALL, INC., of the County and State aforesaid, being duly sworn.	Standards Act of May 19, 1995,	;
	deposes and says that THE MORNING CALL, is a newspaper of general	P.L. 4, No. 1995-2 ("Act-2"), no- tice is hereby given that Venezia	
	circulation as defined by the aforesaid Act, whose place of business is 101 North Sixth Street, City of Allentown, County and State aforesaid, and that the said	Hauling, Inc. ("Venezia") has submitted to the Pennsylvania De-	
	newspaper was established in 1888 since which date THE MORNING CALL has	partment of Environmental Pro-	:
	been regularly issued in said County, and that the printed notice or advertisement	Remediate ("NIR") a site located	1
•	attached hereto is exactly the same as was printed and published in regular editions and issues of the said THE MORNING CALL on the following dates, viz.:	and Environmental Remediation Standards Act of May 19, 1995, P.L. 4, No. 1995-2 ("Act-2"), notice is hereby given that Venezia Hauling, Inc. ("Venezia") has submitted to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate ("NIR") a site located at 3987 Easton-Nazareth Highway (Route 248) in Lower Nazareth Township, Northampton County, Pennsylvania. This NIR states that the site was developed as a truck-	1
	editions and issues of the said TTE PROPERTY CAUSE on the NAVARing dates, 122.	Pennsylvania. This NIR states that	t
		the site was developed as a truck- ing terminal in 1960 and was pur-	
		ing terminal in 1960 and was pur- chased by Venezia in 2006, maintaining its original usage. An	
		area of the property has been found to be impacted with traces	
	and the 10th day of January 2011	area of the property has been found to be impacted with traces of volatile organic compounds, stemming from historic wastewater containment operations, which impacted portions of the soil on the site prior to Venezia's ownership.	•
	Affiant further deposes that he is the designated agent duly authorized by THE	ter containment operations, which	
	MORNING CALL, INC., a corporation, publisher of said THE MORNING	site prior to Venezia's ownership. Venezia has indicated that this	
	CALL, a newspaper of general circulation, to verify the foregoing statement under	area of the property will comply	
	oath, and the affiant is not interested in the subject matter of the aforesaid notice or advertisement, and that all allegations in the foregoing statements as to time,	("SSS"), and any potential con-	,
	place and character of publication are true.	Venezia has indicated that this area of the property will comply with a Site Specific Standard ("SSS"), and any potential contaminant exposure pathways will be eliminated. The property will continue to be used as a non-residential trucking facility in the full	
	Z: 11 i	definal, hocking facility in the 10-	:
	Eim Witnes	ture. Act-2 provides for a 30-day public	
		Act-2 provides for a 30-day public comment period for SSS remediations. The 30-day comment period begins with the publication of this notice. Until the 30-day comment period has passed, Lower Nazareth Township may submit a zareth Township may submit a zareth.	
	Designated Agent, THE MORNING CALL, INC.	begins with the publication of this notice. Until the 30-day comment	
	SWORN to and subscribed before me this 10th day of	period has passed, Lower Naza- reth Township may submit a re-	
	Y	quest to Earth Data Northeast, Inc. ("EDN"), Venezia's consultant, to	
	January 4 2011	be involved in the development of the remediation and reuse plans	
		for the site. Lower Nazareth	
		quest to EDN during this 30-day	
	Notary Public	implement a public involvement	
	SCHMONIVEALTH OF PENINSYLVANIA	of EDN at (610) 524-9466 with any questions or comments regarding	
	Notariai Seal	this notice. Copies of these re-	
	Jeanne Reiss, Notary Public	should also be submitted to Gerard	
	Oity of Allentown, Lehigh County My Commission Expires Nov. 22, 2011	partment of Environmental Pro-	
	Membar, Pennsylvania Association of Notaries	located at 2 Public Square, Wilkes-	
		reth Township may submit a request to Earth Data Northeast, Inc. ("EDN"), Venezia's consultant, to be involved in the development of the remediation and reuse plans for the site. Lower Nazareth Township may also submit a request to EDN during this 30-day comment period to develop and implement a public involvement plan. Please contact Ryan Beebe of EDN at (610) 524-9466 with any questions or comments regarding this notice. Copies of these requests and of any comments should also be submitted to Gerard F. Olenick of the Pennsylvania Department of Environmental Protection's Northeast Regional Office located at 2 Public Square, Wilkes-Barre, PA 18711-0790.	SING COSTS

THE MORNING CALL, INC., publisher of THE MORNING CALL, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid notice and publication costs and certifies that the same have been duly paid.

THE MORNING CALL, INC. a Corporation,
Publishers of THE MORNING CALL
A Newspaper of General Circulation



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMUNITY REVITALIZATION AND LOCAL GOVERNMENT SUPPORT

For DEP Use Only
PF #
Rem ID #

NOTICE OF INTENT TO REMEDIATE

Act 1995-2 requires four general information items to be included in the NIR: the general location, listing of

contaminants, intended use of property, and proposed remediation measures. In addition, indicate the standard(s) to be obtained (if known) and attach a scaled site map (if available).
Property Name Venezia Hauling, Inc.
Former Name(s) / AKA Chemical Leaman Tank Lines, Inc. ("CLTL"), Quality Carriers, Inc. ("Quality")
Address / Location 3987 Easton-Nazareth Road (Route 248)
City Nazareth Zip Code 18064
Municipality(s)Lower Nazareth Township County(ies) Northampton County
Latitude 40 ° (deg). 43 ' (min) 43.84 " (sec) Longitude 75 ° (deg). 18 ' (min) 19.41 " (sec)
Horizontal Collection Method InterpolationSatellite
Horizontal Reference Datum NAD83 Reference Point Approximate Center of Site
☑ Wish to participate in the DEP/EPA MOA. Contact Troy Conrad at tconrad@state.pa.us for details.
EPA ID#, if known PAD 099427908
DEP ID#(s), if known(i.e., eFACTS site ID#, storage tank facility ID#, water quality permit #, watershed permit, air quality permit #, etc.)
Date Release Occurred (if known)
Provide a brief description of the site contamination in plain language (e.g. fuel oil spill, historical chemical industrial area contamination), the names of any know primary contaminants to be addressed, and the intended future use of the property.
Chemical Leaman Tank Lines, Inc. ("CLTL") developed the property as a trucking terminal around 1960. Quality
Carriers, Inc. ("Quality") acquired CLTL in 1999 and owned and operated the terminal through 2006. Venezia
purchased the terminal from Quality in 2006, and has maintained its original usage as a trucking terminal.
Reportedly, during the CLTL ownership, site operations included the cleaning of the interior of tankers and trucks. This activity began in December 1965 and ceased mid-1979. Wastewater generated by the operation, allegedly containing petroleum oils, acids, synthetic latexes, and acrylates, was contained in two, unlined lagoons located near the center of the site. Subsequent soil sampling, performed in and around the former lagoon site during a Soil Investigation completed in February 2010, indicated that four (4) Volatile Organic Compounds (VOCs) were detected within the subsurface intervals (ranging from 9 to 20 feet below ground surface) that exceeded the Pennsylvania Department of Environmental Protection ("PADEP") Statewide Health Standard ("SHS") Medium Specific Concentrations ("MSCs") for a residential, used aquifer. Those compounds included: Benzene, Carbon Tetrachloride, cis-1,2-Dichloroethene, and Trichloroethene ("TCE").
The property will continue to be used as a trucking terminal in the future.

8000-FM-CRLG0010 Rev. 9/2010

Provide a general description of proposed remediation measures.

The Remediator intends that the former lagoon area will comply with a Site Specific Standard. Potential current and/or future exposure pathways will be investigated to ensure that any substantial risk to human health and the environment is eliminated.